27232

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

September 26, 1995

4WD-SSRB

MEMORANDUM:

SUBJECT: Review of CERCLA Sites for Determination of NFRAP Status

FROM: John A. McKeown
Site Assessment Section
South Superfund Remedial Branch, WMD

TO: File

The U.S. EPA has recently reviewed the CERCLA files for the following sites:

1) Amoco Fabrics Co. Hazelhurst Mills - GAD046907689
2) Boeing Machine Products - GAD000615914
3) D&D Drums & Pallets - GAD980729511
4) Griffin Shoal Creek Landfill - GAD981025240
5) Mathis Brothers Chickamauga RD LF - GAD980838494
6) Lafayette Sheet Metal - GAD984270553
7) Westinghouse Electric - GAD003295144

After review of the files, a determination of No Further Response Action Planned (NFRAP) has been made for each of the aforementioned sites. A copy of this memorandum will be placed in each respective file.

R-586-8-0-8

8-13-90
LSI E Phase I
[illegible]

FINAL

SCREENING SITE INSPECTION REPORT, PHASE II
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA
EPA ID #: GAD003295144

Prepared Under
TDD No. F4-8903-40
CONTRACT NO. 68-01-7346

Revision 0

FOR THE

WASTE MANAGEMENT DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

AUGUST 6, 1990

NUS CORPORATION
SUPERFUND DIVISION

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EXECUTIVE SUMMARY

The Westinghouse Electric Corporation (WEC) site is located north of Athens, Clarke County, Georgia. Operations at the facility include the manufacturing and repairing of overland distribution transformers. Between 1958 and 1970, WEC disposed of wastes generated from the manufacturing process in an onsite landfill. Wastes disposed of in the landfill may include spent solvents, acids and bases, paint and oil.

The WEC site is located in the Piedmont Physiographic Province. The rocks underlying this province are massive igneous and metamorphic rocks. The aquifer used in the study area can be characterized as a crystalline rock aquifer. In this aquifer, groundwater is stored in the unconsolidated material overlying the crystalline rock and within fractures that have formed in the crystalline rock. However, only three private wells are located in the 4-mile site radius.

Water is supplied to Athens and the surrounding areas by surface water obtained from the North and Middle Oconee rivers. One intake is located approximately 2.65 stream miles south of the site on the North Oconee River. There is a slight potential for site-related contaminant migration to the surface water pathway during periods of heavy rainfall. Approximately 98,800 persons are served by the Athens Water Department. The results of sediment sampling revealed the presence of inorganic contaminants with significantly higher concentrations than background conditions.

Organic and inorganic analytical results revealed the presence of site-related contaminants in the surface soils collected. Organic contaminants detected from the samples include fluoranthene, pyrene, benzo(a) anthracene, and benzo (b and/or k) fluoranthene. Inorganic elements revealed in samples included barium, chromium, copper, lead and zinc. There is a population of approximately 49,884 within the 4-mile site radius. Access to the landfill is unrestricted, and uncontained contaminated surface soils could be dispersed by the wind. Potentially affected targets include employees at the WEC facility and adjacent industrial properties and 486 people residing within the 1-mile site radius.

Based on the aforementioned information, FIT 4 recommends that a Listing Site Inspection, Phase I, be conducted at the WEC site.

1.0 INTRODUCTION

The NUS Corporation Region 4 Field Investigation Team (FIT) was tasked by the U. S. Environmental Protection Agency (EPA), Waste Management Division to conduct two screening site inspections (SSI) at the Westinghouse Electric Corporation site in Athens, Clarke County, Georgia. The inspections were performed under the authority of the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA). The tasks were performed to satisfy the requirements stated in Technical Directive Document (TDD) numbers F4-8903-40 and F4-8904-04. The field investigations were conducted May 3-4, 1989.

1.1 OBJECTIVES

The objectives of this inspection were to determine the nature of contaminants present at the site and to determine if a release of these substances has occurred or may occur. Further, this inspection sought to determine the possible pathways by which contamination could migrate from the site and the populations and environments it would potentially affect. Through these objectives, a recommendation was made regarding future activities at the site.

1.2 SCOPE OF WORK

The objectives were achieved through the completion of a number of specific tasks. These activities were to:

- Obtain and review relevant background materials.
- Obtain information on local water systems.
- Evaluate target population within a 4-mile radius of the site with regard to groundwater and 15-stream miles with regard to surface water use.
- Develop a site sketch, drawn to scale.
- Collect environmental samples.

2.0 SITE CHARACTERIZATION

2.1 SITE BACKGROUND AND HISTORY

The Westinghouse Electric Corporation (WEC) is located on Newton Bridge Road, in Athens, Clarke County, Georgia. The facility has been actively manufacturing and repairing overhead distribution transformers at the present location since 1957. Wastes generated from the manufacturing processes were disposed of in an onsite landfill from 1958 to 1970 in fiber containers, and five- and 55-gallon metal drums (Refs. 1, 2). Between 1971 and 1977, generated wastes were disposed of at the Clarke County landfill located east of Athens, Georgia. During 1978 and 1979, WEC began shipping accumulated wastes to SCA services in South Carolina. Current disposal practices employ reclamation and incineration (Ref. 1).

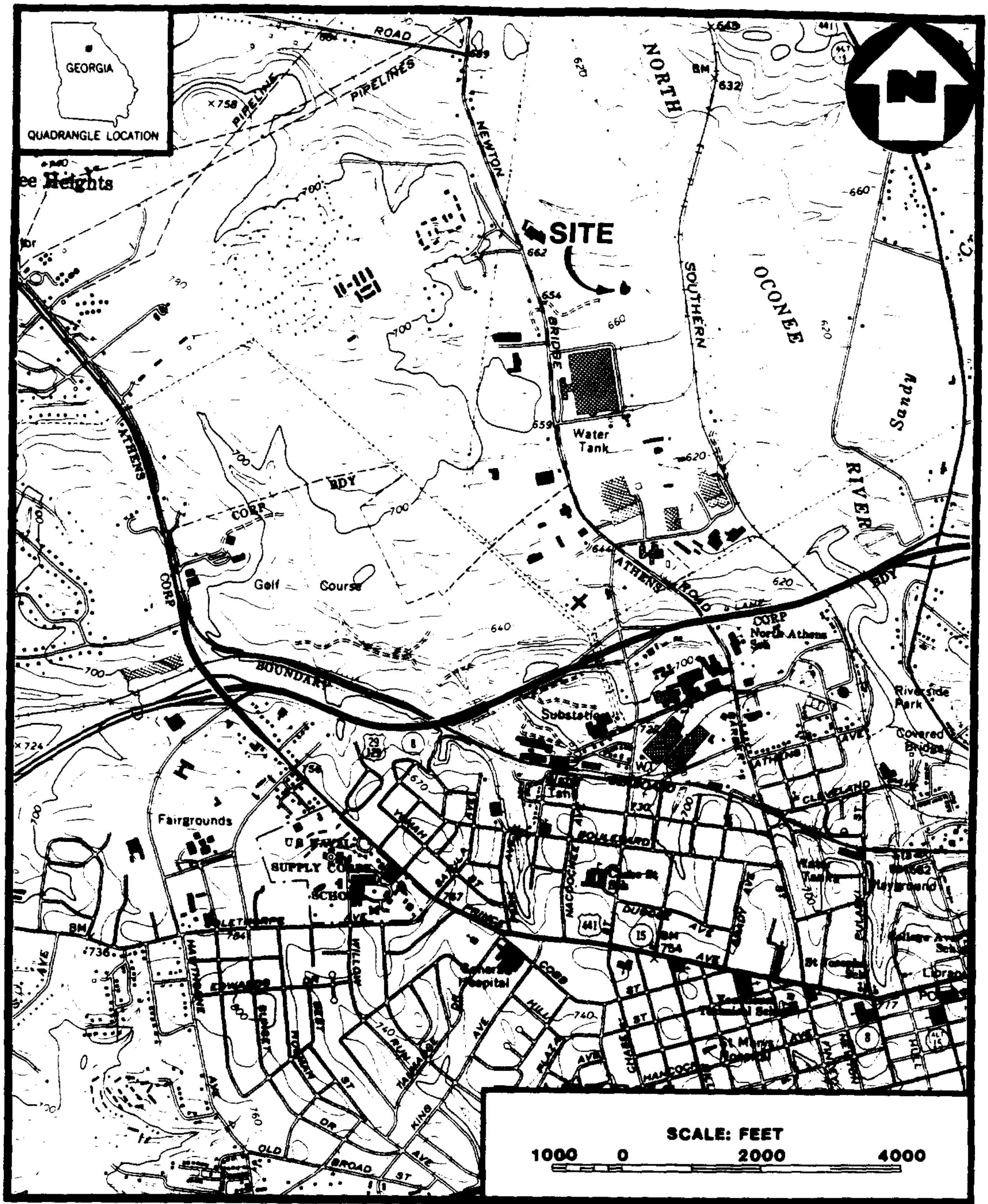
Sometime during 1988, WEC representatives began reviewing all of their facilities to ensure compliance with federal, state, and local environmental regulations. It was at this time that WEC representatives became aware of past disposal practices involving the landfill (Ref. 3). On December 20, 1988, WEC submitted an EPA Notification of Hazardous Waste Site (EPA Form 8900-1) for the Athens facility (Ref. 2).

The Part A Application for this facility was withdrawn in 1982, and the facility is presently classified as a generator of hazardous waste (Ref. 4).

2.2 SITE DESCRIPTION

2.2.1 Site Features

The WEC facility, at 33°58'31.0" N latitude and 083°23'44.0" W longitude, is located in an industrial district north of the city of Athens, Clarke County, Georgia (Figure 1) (Appendix A). The entire WEC facility is approximately 237.8 acres (Ref. 2). The landfill, which is located 900 feet northeast of the main facility, is irregularly shaped and consists of approximately 1 acre. The site is located on a ridge, and drainage is to the east and northeast (Figure 2) (Ref. 5, Appendix A). Facility slope is approximately 2.0 percent (Appendix A).

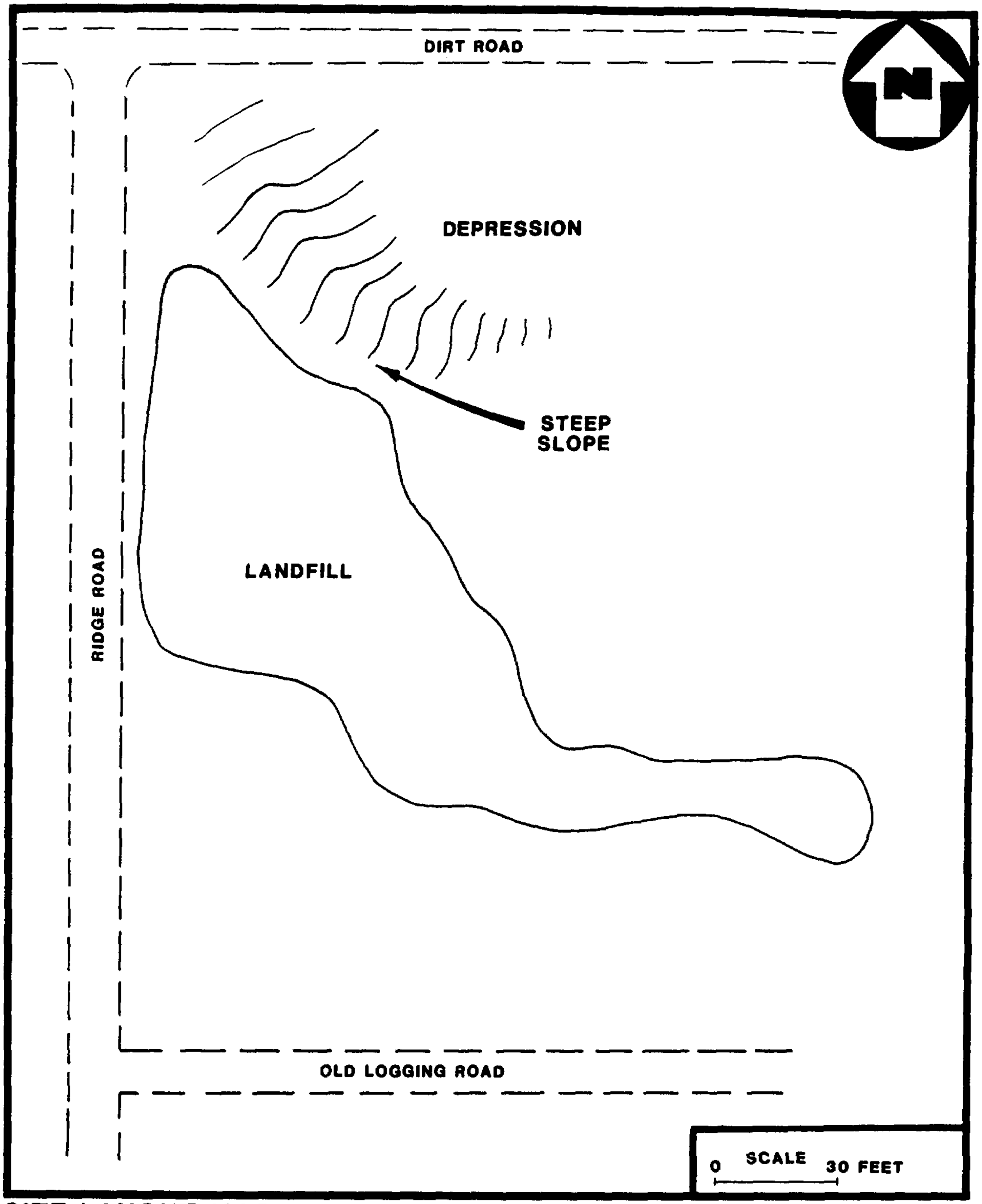


BASE MAP IS A PORTION OF THE USGS 7.5 MINUTE QUADRANGLE, ATHENS WEST, GA. 1984.

SITE LOCATION MAP
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, GEORGIA

FIGURE 1

NUS CORPORATION



SITE LAYOUT MAP
WESTINGHOUSE ELECTRIC
CORPORATION LANDFILL
ATHENS, CLARKE COUNTY, GEORGIA

FIGURE 2

NUS CORPORATION

The landfill, which is heavily vegetated with no evidence of any ongoing activities, is readily accessible. An unrestricted dirt road located adjacent to the landfilled area is accessible from the WEC north parking lot. In addition, no fence or barriers to entry are in place around the landfill. The dirt road leading from the north parking lot bounds the site to the north and west. The site is bounded by an old logging dirt road to the south, and woods to the east (Ref. 5).

2.2.2 Waste Characteristics

Westinghouse disposed of halogenated solvents and treated acids and bases resulting from electrical transformer manufacturing processes in a landfill from 1958 to 1970 (Ref. 6). The hazardous waste present at the facility include spent solvents, acids and bases, paint, and oil. The acids are a mi ture of phosphoric acid and hydrochloric acid, known as bright dip. Other wastes identified by the preliminary assessment were oily waste, solvents, heavy metals, and methyl ethyl ketone (Ref. 1). An identification table of the waste liquids included cleaning mixtures (kerosenes), wire enamel thinners, enamel paint strippers, paint thinners (xylene), wire drawing and rolling lubes, transformer oil, and lubricating oil (Ref. 7). WEC representatives stated that mineral oil was used in the transformers instead of PCBs (Ref. 8).

3.0 REGIONAL POPULATIONS AND ENVIRONMENTS

3.1 POPULATION AND LAND USE

3.1.1 Demography

The study area is located approximately 1 mile north of Athens and is adjacent to industrial properties and rural areas (Appendix A). The population of Athens, Georgia is approximately 45,000 (including students attending the University of Georgia), the major portion of which is encompassed by the southeast quadrant of the 4-mile site radius (Ref. 9). Population density increases rapidly to the south of the WEC site. To the east, north, and west, however, population decreases rapidly (Appendix A). The population distribution is 486 between 0 and 1 mile; 18,718 between 1 and 2 miles; 18,265 between 2 and 3 miles; and 12,415 between 3 and 4 miles (Ref. 10).

3.1.2 Land Use

Within a 4-mile radius of the site, the area is comprised, in descending percentage, of rural/undeveloped, residential, commercial, and industrial property. The nearest residence is located approximately 0.5 mile west-northwest of the landfill. The closest multifamily dwelling, Rolling Ridge Apartments, is located 0.7 mile northwest of the site and consists of sixteen apartment buildings. As seen from the USGS topographic map, the WEC landfill is within 1 mile of the North Athens Elementary School. Students attend 14 other schools, including the University of Georgia, in the 4-mile radius (Ref. 8, Appendix A).

The North Oconee River Park, the closest park to the WEC landfill, is situated along the banks of the North Oconee River approximately 1 mile southeast of the site. The park offers picnicing and fishing (Ref. 8).

The nearest commercial area is located in downtown Athens approximately 2 miles south of the site. This area is a mixture of shops, banks, and restaurants, which comprises the downtown district (Ref. 8).

Areas of dense industrial development are located south of the site. However, the nearest industry, Lyons Textile Mills, is located approximately 0.3 mile northwest of the WEC site (Ref. 8).

3.2 SURFACE WATER

3.2.1 Climatology

The WEC landfill is located within the Piedmont Physiographic Province. Average rainfall near the facility is 44 inches, and mean annual lake evaporation is 42 inches. Average net annual precipitation is 2 inches. The rainy season in the Piedmont Physiographic Province occurs during the warm period from May to August (Ref. 11). The Athens area has a relatively mild climate. Temperatures average 42°F in January and 79°F in July (Ref. 12, p. 2). Average annual rainfall is 48 inches (Ref. 13, p. 43). There are two periods of peak rainfall, one in the late winter and one in mid-summer (Ref. 12, p. 5). Net annual precipitation is 2 inches (Ref. 13, pp. 43, 63). The 1-year, 24-hour rainfall is 3.25 inches (Ref. 14).

3.2.2 Overland Drainage

Surface water runoff follows two patterns at the WEC landfill. Rainwater falling on the west, south, east, and center portions of the site trends in an eastward direction toward a small, swampy basin. The swampy basin is less than an acre in size, and there are no routes for surface water migration from the basin. Surface water runoff for the remaining area of the site (north portion) drains in a northeastward direction to an oval-shaped slight depression. The depression is bounded by the higher ground of the landfilled area to the west, south, and east. A dirt road bounds the north portion of the depression. Surface water that collects in the swampy basin and depression would percolate down to groundwater (Ref. 8). However, during extremely heavy rainfall, surface water may migrate to a swampy region located approximately 1000 feet northeast of the landfill.

3.2.3 Potentially Affected Water Bodies

Water that collects in the swampy region flows in a northeasterly direction for approximately 0.3 mile and drains into the North Oconee River (Refs. 5, 8, Appendix A). The previously mentioned North Oconee River Park is located 2.0 stream miles downgradient from the confluence of the swamp and river (Ref. 8, Appendix A). Also, one of the water intakes for the municipal water supply is located 2.65 stream miles downgradient from the swamp and river confluence. Water is supplied to Athens and surrounding areas by surface water obtained from the North Oconee and Middle Oconee rivers (Ref. 15). The water obtained from the two intakes is treated and mixed prior to distribution. A third intake is located on Sandy Creek. Water is pumped from the intake to a reservoir. The water is allowed to settle and is used only during times when the North and Middle Oconee rivers are low.

The third intake is not located along the surface water migration pathway. The municipal system serves approximately 26,000 connections (Ref. 15).

3.3 GROUNDWATER

3.3.1 Hydrogeology

The site is located in the Piedmont Physiographic Province. The rocks underlying this province are massive igneous and metamorphic rocks of relatively low permeability (Ref. 16, pp. 4, 5).

The aquifer used in the study area can be characterized as a crystalline rock aquifer. In this aquifer, groundwater is stored in the unconsolidated material overlying the crystalline rock and within fractures that have formed in the crystalline rock (Ref. 16, p. 13). The residual soils (regolith) overlying bedrock are capable of storing large quantities of groundwater, and well yields are generally highest in areas that have a thick regolith that is saturated with water (Ref. 17, pp. 8-11).

The site is underlain by amphibolite interlayered with biotite schist and biotite gneiss. Wells intercepting contact zones between these rock units often have increased permeability as do wells that have intersect fault zones. Well yields range from 20 to 225 gallons per minute (gpm), with an average yield of 52 gpm. The average depth of wells in the Athens area is 246 feet with a typical casing depth of 69 feet (Ref. 17, plate 1). Few wells are completed to depths greater than 400 feet due to a decrease in the size and number of fractures within the rock below this depth (Ref. 17, p. 9).

Groundwater recharge occurs in topographic highs and groundwater discharge occurs in topographically low areas. The depth to the water table is also dependent on local topography. The water table may be at or near land surface in stream valleys. However, on steep hills or narrow ridges, the depth to the water table may be much greater (Ref. 17, p. 11).

The aquifer in the regolith is unconfined, and groundwater flow generally follows local topographic gradients (Ref. 17, p. 11). Groundwater flow within fractures of the underlying crystalline rock is influenced by fracture orientation. Wells penetrating deeper fracture systems may intercept groundwater that is under confined conditions.

3.3.2 Aquifer Use

There is very little use of groundwater in the study area. Three private wells were identified within the 3-mile site radius. The closest well is located 1 mile west of the site (Ref. 15).

3.4 SUMMARY OF POTENTIALLY AFFECTED POPULATIONS AND ENVIRONMENTS

The pathways of concern for the site include surface water, air, and onsite exposure. The groundwater pathway is not a concern due to the almost nonexistent use of the aquifer within the 4-mile site radius.

The air and onsite exposure pathways are the primary pathways of concern due to the possible presence of uncontained and contaminated soils. Potentially affected targets within a 4-mile site radius include residents, employees, and students. The population of residents within a 4-mile radius of the site is estimated at 49,884 (Ref. 10). Targets for onsite exposure include employees at the WEC facility and adjacent industrial properties and residents within a 1-mile radius of the site. However, the population within a 1-mile site radius is only 486 (Ref. 10, Appendix A).

Potential for site-related contaminant release to the surface water pathway is unlikely; however, it may be possible during periods of extremely heavy rainfall. Potentially affected targets along the extended surface migration pathway include those persons using the North Oconee River for recreational purposes and the population of 98,800 (26,000 x 3.8 per household) that is served by the Athens Water Department.

the visible trench. East of Line 6, a 30-foot by 30-foot area with magnetic readings greater than 53,000 gammas was detected. Two locations within this area were targeted for sampling. Another anomalous area to the north and west of Line 1 was found. Heavy brush and overgrowth prevented a systematic survey of this location. Figure 3 is a magnetic intensity contour map. Anomalous areas are shown in this figure. The road along the top of the ridge, about 30 feet west of Line 1 was surveyed with the magnetometer after the trucks were moved. No readings above background were detected along the road (Ref. 18).

The site is located in a rural area with no sources of interference for geophysical instruments. The magnetometer was effective in locating magnetic anomalies at this site. Some of the visually disturbed areas did not contain magnetic anomalies. Since some of the waste was reportedly buried in nonmetallic drums, the EM-31 Conductivity Meter would be effective in detecting disturbed areas that did not contain any metallic debris. An EM-31 Conductivity Meter may be used in the future to refine the boundaries of the waste burial area, should removal of the waste be necessary. Appendix D contains field data sheets, as well as additional information on the use and applications of the magnetometer and the conductivity meter.

4.2 SAMPLE COLLECTION

4.2.1 Sample Collection Methodology

All sample collection, sample preservation, and chain-of-custody procedures used during this investigation were in accordance with the standard operating procedures as specified in Sections 3 and 4 of the Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division, April 1, 1986.

4.2.2 Duplicate Samples

Split groundwater samples were requested for groundwater by the WEC representatives. However, a background groundwater sample could not be obtained, and the remaining scheduled groundwater samples were canceled.

4.2.3 Description of Samples and Sample Locations

Nine environmental samples were collected for the investigation: four surface soil samples, three subsurface soil samples, and two sediment samples. Sample codes, descriptions, and locations are present in Table 1 and illustrated in Figures 4 and 5.

The surface soil samples, collected from 2 to 12 inches below land surface (bls), included one background sample and three samples from the landfilled area.

The three subsurface soil samples, including one background sample, were collected between 2 and 5 feet bls. One sample was collected from the landfilled area, and the remaining sample was collected east of the landfill at a location downgradient of surface water runoff.

One sediment sample was obtained from an unnamed intermittent creek northwest of the site and served as the background sample. A second sediment sample was collected at the confluence of the intermittent creek, which had developed into a swampy area, and the North Oconee River located northeast of the site.

4.3 SAMPLE ANALYSIS

4.3.1 Analytical Support and Methodology

All samples collected were analyzed under the Contract Laboratory Program (CLP) and analyzed for all parameters listed in the Target Compound List (TCL). Organic and inorganic analysis of soil samples was performed by Region IV Environmental Protection Agency analytical service laboratory located in Athens, Georgia.

All laboratory analyses and laboratory quality assurance procedures used during this investigation were in accordance with standard procedures and protocols as specified in the Analytical Support Branch Operations and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division; revised June 1, 1985 or as specified by the existing United States Environmental Protection Agency standard procedures and protocols for the contract analytical laboratory program.

TABLE 1

SAMPLE CODES AND LOCATIONS, AND RATIONALE
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

Sample Code	Location and Rationale	Collection Time	Date	Depth (ft bls).	Remarks
WH-SS-01	Northwest of site from undisturbed area to establish background conditions	1515	05/03	-	-
WH-SB-01	Northwest of site from undisturbed area to establish background conditions	1525		5-6	-
WH-SD-01	Northwest of site from an intermittent stream upgradient of landfill to establish background conditions	1525	05/03	-	-
WH-SD-02	Confluence of stream and North Oconee River downgradient of landfill to detect contaminant migration off site	1815	05/03	-	-
WH-SS-02	East area of landfill taken at magnetic anomaly identified during geophysical survey to identify source of contamination	1020	05/04	-	-
WH-SB-02	East area of landfill taken at magnetic anomaly identified during geophysical survey to identify source of contamination	0950	05/04	5-6	-
WH-SS-03	Northwest area of landfill taken at magnetic anomaly identified during geophysical survey to identify source of contamination	1030	05/04	-	-
WH-SB-03	East area of landfill on west border of closed basin to identify contaminant migration from landfill	1150	05/04	2-3	-

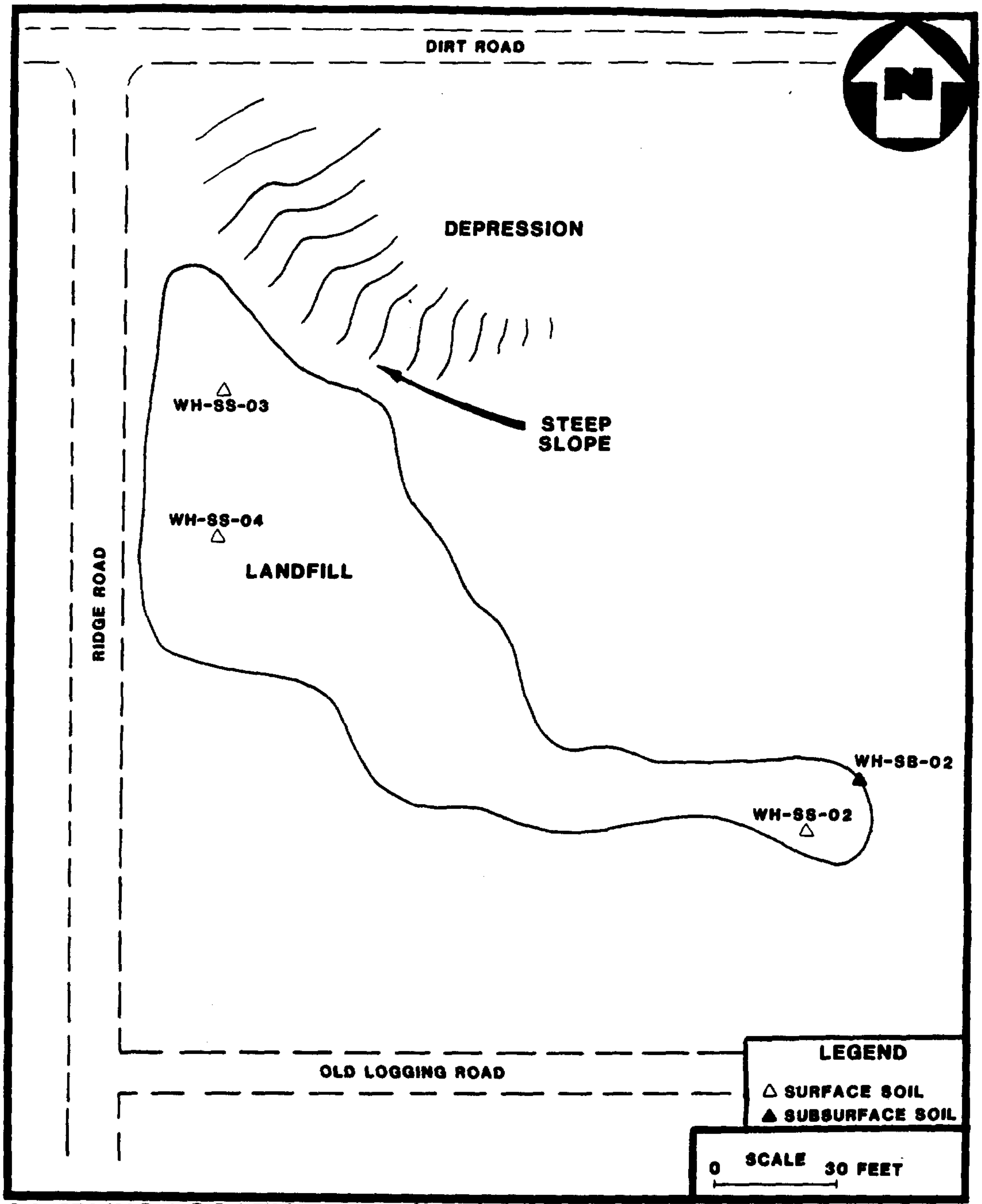
WH - Westinghouse Electric
SS - Surface Soil
SB - Subsurface Soil
SD - Sediment

TABLE 1

SAMPLE CODES AND LOCATIONS, AND RATIONALE
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

Sample Code	Location and Rationale	Collection Time	Date	Depth (ft bls).	Remarks
WH-SS-04	Northwest area of landfill taken at magnetic anomaly identified during geophysical survey to identify source of contamination	1120	05/04	-	-

WH - Westinghouse Electric
SS - Surface Soil
SB - Subsurface Soil
SD - Sediment



SAMPLING LOCATION MAP (SOURCE)
WESTINGHOUSE ELECTRIC
CORPORATION LANDFILL
ATHENS, CLARKE COUNTY, GEORGIA

FIGURE 4

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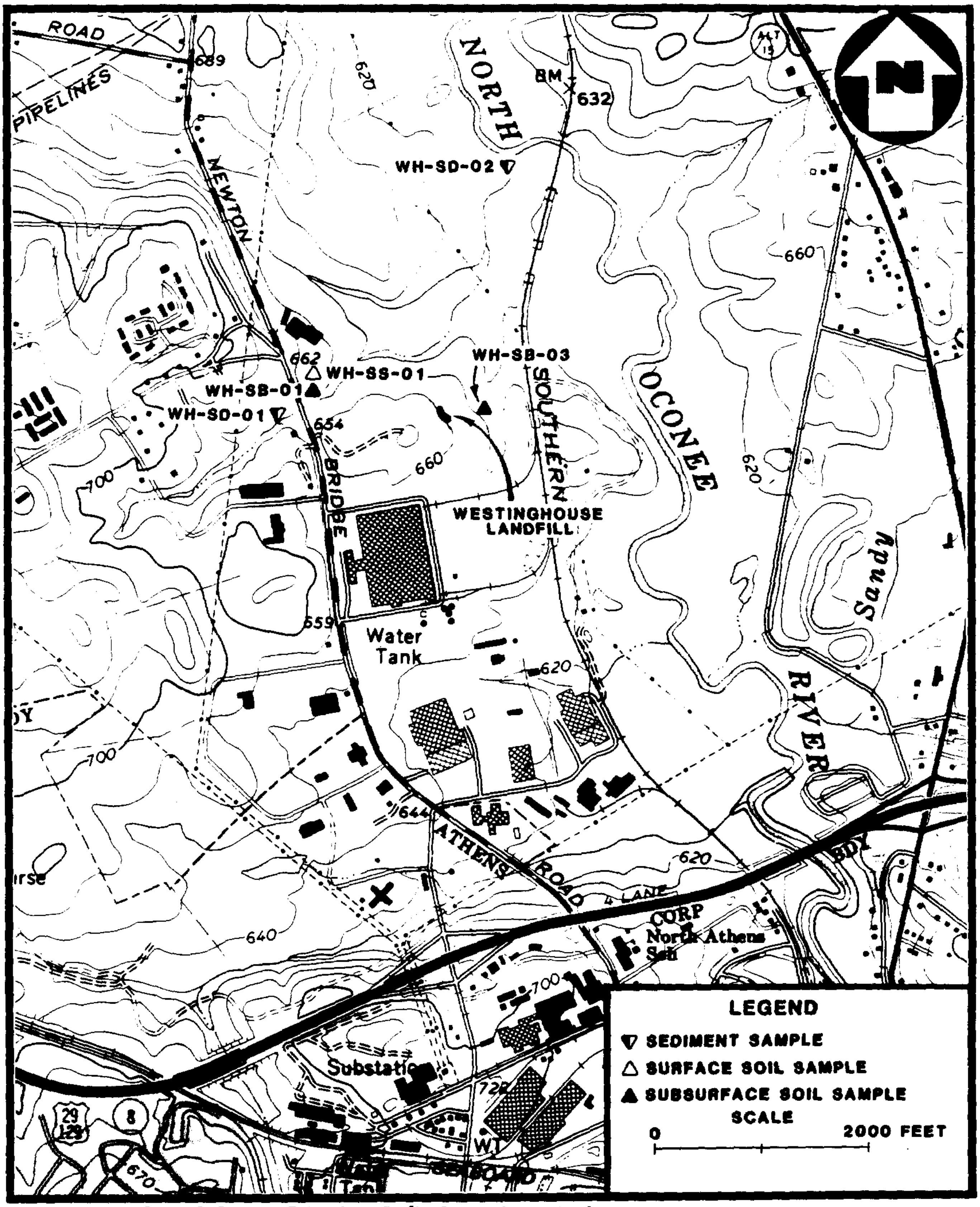

SAMPLING LOCATION MAP (NONSOURCE)
WESTINGHOUSE ELECTRIC
CORPORATION LANDFILL
ATHENS, CLARKE COUNTY, GEORGIA

FIGURE 5

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4.3.2 Presentation of Analytical Data Quality

All analytical data were subjected to a quality assurance review as described in the EPA, Environmental Services Division laboratory data evaluation guidelines. In the tables, some of the concentrations of the organic and inorganic parameters have been flagged with a "J". This indicates that the qualitative analysis was acceptable, but the quantitative value has been estimated. A few other compounds are flagged with an "N" indicating that they were detected based on the presumptive evidence of their presence. This means that the compound was tentatively identified, and its detection cannot be used as positive identification of its presence. The complete analytical data sheets are presented in Appendix B.

4.3.3 Presentation of Analytical Results

Throughout the following discussion of analytical results, the concentrations of some of the contaminants detected have been described as "significant". This means that the concentration was either three times that found in the background sample or it was three times the minimum quantitation limit (MQL).

Sample analyses detected several inorganic constituents in the soil and sediment samples. Significant concentrations of chromium, copper, lead, and zinc were found in samples WH-SS-03, WH-SS-04, and WH-SD-02.Cobalt was found in subsurface soil sample WH-SB-03 at 15 mg/kg (3 x MQL). Sample WH-SB-03 also contained 1300 mg/kg manganese (5 x background) and 0.1 mg/kg mercury (20 x MQL). Inorganic analytical results can be found in Tables 2, 3, and 4.

A large number of organic constituents were found in the surface soil samples, WH-SS-02, WH-SS-03, and WH-SS-04. Sample WH-SS-02 contained a total of 4 mg/kg (estimated) of substituted benzenes (tentatively identified), 200 mg/kg unidentified compounds, and more than 450 mg/kg polynuclear aromatic (PNA) compounds including 16 mg/kg phenanthrene (9.4 x MQL), 78 mg/kg fluoranthene (46 x MQL), 67 mg/kg pyrene (39 x MQL), 28 mg/kg benzo (a) anthracene (16 x MQL), 25 mg/kg chrysene (15 x MQL), 51 mg/kg benzo (b and/or k) fluoranthene (30 x MQL), and 24 mg/kg benzo-a-pyrene (14 x MQL). The other PNAs are shown as estimated concentrations, and some of them are tentatively identified. These compounds are components of lubricating oils.

TABLE 2

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (mg/kg)	Background	Onsite		
	WH-SS-01	WH-SS-02	WH-SS-03	WH-SS-04
ALUMINUM	30,000	19,000	28,000	18,000
ANTIMONY	-	-	-	100
BARIUM	160	92	130	9000
CALCIUM	-	2200	-	1800
CHROMIUM	14	28	2400	8700
COBALT	15	5.9	-	55
COPPER	7.5	51	23,000	9900
IRON	26,000	14,000	29,000	29,000
LEAD	25	140	10,000	9000
MAGNESIUM	8300	1900	3500	1000
MANGANESE	800	320	500	210
MERCURY	-	-	0.05	0.10
NICKEL	-	6	-	58
POTASSIUM	7800	1800	-	-
VANADIUM	61	43	70	46
ZINC	53	100	3000	10,000
CYANIDE	-	0.25	-	1.2
TITANIUM	1800	710	1100	170
YTTRIUM	14	13	-	-
STRONTIUM	-	8.2	-	120

\- Material analyzed for but not detected above minimum quantitation limit

TABLE 3

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SUBSURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (mg/kg)	Background WH-SB-01	Onsite WH-SB-02	Downgradient WH-SB-03
ALUMINUM	27,000	55,000	50,000
BARIUM	26	90	60
CALCIUM	-	580	290
CHROMIUM	29	34	56
COBALT	-	-	15
COPPER	34	22	13
IRON	45,000	53,000	34,000
LEAD	29	42	21
MAGNESIUM	1100	2100	1200
MANGANESE	250	310	1300
MERCURY	-	-	0.1
NICKEL	14	-	11
POTASSIUM	1100	2500	1200
VANADIUM	120	150	81
ZINC	26	31	40
CYANIDE	-	-	0.33
TITANIUM	940	1900	1200
YTTRIUM	9.7	-	-

\- Material analyzed for but not detected above minimum quantitation limit

TABLE 4

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SEDIMENT SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

	Background	Downgradient
PARAMETERS (mg/kg)	WH-SD-01	WH-SD-02
ALUMINUM	4400	46,000
BARIUM	21	180
CALCIUM	150	1200
CHROMIUM	15	47
COBALT	-	18
COPPER	3.9	30
IRON	16,000	50,000
LEAD	6.3	45
MAGNESIUM	710	1900
MANGANESE	150	4500
POTASSIUM	820	1400
VANADIUM	42	120
ZINC	12	57
TITANIUM	410	1000
YTTRIUM	7.1	25
STRONTIUM	-	12

\- Material analyzed for but not detected above minimum quantitation limit

Sample WH-SS-03 contained 130 mg/kg of fatty acids or fatty acid derivatives, tentatively identified with estimated concentrations ranging from 40 to 2000 mg/kg. Fatty acids are components of drawing and rolling compounds (greases). This sample also contained an estimated 80 ug/kg xylene (2 x MQL) and a total estimated concentration of 75 mg/kg of seven tentatively identified alkyl benzenes, which are components of kerosenes and other solvents. This sample also contained a significant concentration of PCBs, 1100 ug/kg Aroclor 1242 (18 x MQL) and an estimated 350 ug/kg tentatively identified Aroclor 1260 (5.6 x MQL) and smaller concentrations of Aldrin, Dieldrin, and 4,4'-DDD.

Sample WH-SS-04 contained a total of over 22,000 mg/kg (2.2%) of alkyl substituted benzenes, including 1100 mg/kg ethyl benzene (28,200 x MQL) and 7100 mg/kg xylenes (182,000 x MQL). These are solvents used by Westinghouse in the manufacturing process and listed as components of the waste streams. The other substituted benzenes, tentatively identified with estimated concentrations ranging from 10 to 6000 mg/kg, are components of kerosene and fuel oils. This sample contained a total concentration of 2400 mg/kg PNAs including 620 mg/kg naphthalene (365 x MQL) and 240 mg/kg 2-methylnaphthalene (141 x MQL), 6200 mg/kg of fatty acids, 560 mg/kg phenols (antioxidant, surfactant, wood preservative, and insecticide) including 180 mg/kg 4-nitrophenol (54 x MQL) and 180 mg/kg 2, 4-dinitrophenol (54 x MQL), 290 mg/kg nonaromatic hydrocarbons, and 2000 mg/kg unidentified compounds and petroleum product. The contaminants in this sample are components of kerosene, solvents, and lubricants.

Sediment sample WH-SD-02 contained an estimated 6000 ug/kg of hexadecanoic acid (3 x background) and an estimated 700 ug/kg of octadecanoic acid (tentatively identified) and petroleum product.

Results of subsurface soil samples revealed no analytical significant contamination of organic constituents.

Organic analytical results can be found in Tables 5, 6, and 7.

TABLE 5

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (ug/kg)	Backgroun	Onsite		
	WH-SS-01	WH-SS-02	WH-SS-03	WH-SS-04
PURGEABLE COMPOUNDS				
ETHYL BENZENE	-	-	-	1.100,000
(M- AND/OR P-)XYLENE	-	-	-	17,000,000
O-XYLENE	-	-	81J	5.400,000
TRIMETHYLBENZENE	-	-	200JN	5,000,000JN
PETROLEUM PRODUCT	-	-	N	-
EXTRACTABLE COMPOUNDS				
NAPHTHALENE	-	-	-	620,000
2-METHYLNAPHTHALENE	-	-	-	240,000
ACENAPHTHYLENE	-	2800J	-	-
4-NITROPHENOL	-	-	-	180,000
2,4-DINITROPHENOL	-	-	-	180,000
PHENANTHRENE	-	16,000	-	13,000J
ANTHRACENE	-	5200J	-	-
FLUORANTHENE	-	78,000	-	-
PYRENE	-	67,000	-	-
BENZO(A)ANTHRACENE	-	28,000	-	-
CHRYSENE	-	25,000	-	-
BENZO(B AND/OR	-	51,000	-	-
BENZO-A-PYRENE	-	24,000	-	-
INDENO (1,2,3-CD) PYRENE	-	10,000J	-	-
DIBENZO(A,H)ANTHRACENE	-	3700J	-	-
BENZO(GHI)PERYLENE	-	9500J	-	-
HEXADECANOIC ACID	1000JN	-	2E6JN	4E6JN
OCTADECANOIC ACID	-	-	700,000JN	1E6JN
(DIMETHYLBUTENYLIDENE)BISBEN	-	2000JN	-	-
METHYLPHENANTHRENE	-	2000JN	-	-
CYCLOPENTAPHENANTHRENE	-	6000JN	-	-
PHENYLNAPHTHALENE	-	3000JN	-	-

-   Material analyzed for but not detected above minimum quantitation limit

J   Estimated value

N   Presumptive evidence of presence of material

TABLE 5

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (ug/kg)	Backgroun	Onsite		
	WH-SS-01	WH-SS-02	WH-SS-03	WH-SS-04
BIS(BUTADIYNEDIYL)BENZENE	-	2000JN	-	-
BENZONAPHTHOFURAN	-	9000JN/3	-	-
PHENANTHRENECARBONITRILE	-	3000JN	-	-
METHYLFLUORANTHENE	-	20,000JN/4	-	-
BENZOFLUORENE	-	8000JN	-	-
BENZONAPHTHOTHIOPHENE	-	7000JN	-	-
BENZOFLUORANTHENE (NOT B OR	-	40,000JN/2	-	-
BENZOPHENANTHRENONE	-	2000JN	-	-
TETRADECANOIC ACID	-	-	200,000JN	200,000JN
METHYLPROPYLBENZENE	-	-	5000JN	900,000JN
DIETHYLMETHYLBENZENE	-	-	9000JN/2	100,000JN
(DIMETHYLPROPYL)BENZENE	-	-	6000JN	1E6JN/6
DIMETHYL(METHYLETHYL)BENZENE	-	-	10,000JN/2	1E6JN/6
ETHYLTRIMETHYLBENZENE	-	-	4000JN	100,000JN
HEXANOIC ACID	-	-	6000JN	-
COPAENE	-	-	3000JN	-
HEPTADECANOL	-	-	40,000JN/2	-
PENTADECANOIC ACID	-	-	40,000JN	-
TETRADECANAL	-	-	40,000JN	-
HEPTADECANOIC ACID	-	-	100,000JN	-
ETHYLDIMETHYLBENZENE	-	-	40,000JN/5	6E6JN/7
PROPYCYCLOHEXANE	-	-	-	10,000JN
PROPYLBENZENE	-	-	-	30,000JN
ETHYLMETHYLBENZENE	-	-	-	200,000JN/3
TRIMETHYLBENZENE	-	-	-	900,000JN/3
PROPENYLCYCLOHEXANE	-	-	-	200,000JN
DIHYDROINDENE	-	-	-	100,000JN
(METHYLPROPYL)BENZENE	-	-	-	20,000JN
BUTYLBENZENE	-	-	-	600,000JN

- \- Material analyzed for but not detected above minimum quantitation limit
- J Estimated value
- N Presumptive evidence of presence of material

TABLE 5

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (ug/kg)	Backgroun	Onsite		
	WH-SS-01	WH-SS-02	WH-SS-03	WH-SS-04
METHYLDECAHYDRONAPHTHALENE	-	-	-	20,000JN
PENTYCYCLOHEXANE	-	-	-	30,000JN
METHYLDIHYDROINDENE	-	-	-	700,000JN
DIETHYLBENZENE	-	-	-	1E6JN
TETRADYDRONAPHTHALENE	-	-	-	200,000JN
((METHYLBENZYL)SULFONYL)PHEN	-	-	-	100,000JN
DIMETHYDIHYDROINDENE		-	-	200,000JN/2
DIMETHYL(METHYLPROPYL)BENZEN	-	-	-	90,000JN/2
1-METHYLNAPHTHALENE	-	-	-	60,000JN
DIMETHYLNAPHTHALENE	-	-	-	20,000JN
HEXAMETHYLOCTAHYDROINDENE	-	-	-	100,000JN
BIS(DIMETHLETHYL)METHYLPHENO	-	-	-	100,000JN
TRIMETHYLNAPHTHALENE	-	-	-	20,000JN/2
METHYL(METHYLETHYL)NAPHTHALE	-	-	-	30,000JN
DIMETHYLPHENANTHRENE	-	-	-	30,000JN
HEXADECENOIC ACID	-	-	-	1E6JN
ETHYL(METHYLETHYL)BENZENE	-	-	-	2E6JN
METHYLPROPYLCYCLOHEXANE	-	-	-	50,000JN/2
PETROLEUM PRODUCT	-	-	N	N
UNIDENTIFIED COMPOUNDS/NO.	-	200,000J/2	2E6JN/11	2E6J/10
PESTICIDE\PCB COMPOUNDS				
ALDRIN	-	-	48	23
DIELDRIN	-	-	43J	66
4,4'-DDD (P,P'-DDD)	-	-	74	-
PCB-1242 (AROCLOR 1242)	-	-	1100	-
PCB-1260 (AROCLOR 1260)	-	-	350JN	-

- Material analyzed for but not detected above minimum quantitation limit
J Estimated value
N Presumptive evidence of presence of material

TABLE 6

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SUBSURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (ug/kg)	Background WH-SB-01	Onsite WH-SB-02	Downgradient WH-SB-03
EXTRACTABLE COMPOUNDS			
BENZO(B AND/OR K)FLUORANTHENE	-	170J	-
HEXADECANOIC ACID	5000JN	-	5000JN
OCTADECANOIC ACID	400JN	-	700JN
TETRADECANOIC ACID	-	-	200JN
PESTICIDE\PCB COMPOUNDS			
4,4'-DDT (P,P'-DDT)	-	8.1J	-

- Material analyzed for but not detected above minimum quantitation limit
J Estimated value
N Presumptive evidence of presence of material

TABLE 7

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SEDIMENT SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (ug/kg)	Background WH-SD-01	Downgradient WH-SD-02
EXTRACTABLE COMPOUNDS		
HEXADECANOIC ACID	2000JN	6000JN
OCTADECANOIC ACID	-	700JN
PETROLEUM PRODUCT	-	N

- \- Material analyzed for but not detected above minimum quantitation limit
- J Estimated value
- N Presumptive evidence of presence of material

5.0 SUMMARY

The operations at the WEC facility included manufacturing and repairing overhead distribution transformers, a process that has been conducted since 1958. The results of this investigation revealed the presence of organic and inorganic contaminants, consistent with the WEC operations, in surface soil samples in excess of background conditions. Access to the site could be obtained by nearby residents, and the uncontained contaminated surface soils could be dispersed by the wind. Potentially affected targets include employees at the WEC facility and adjacent industrial properties and the 486 residents residing within a 1-mile radius of the site. Also, the population within the 4-mile site radius is estimated at 49,884.

The results of sediment sampling at the confluence of the swampy region and the North Oconee River revealed the presence of ten inorganic contaminants with significantly higher concentrations than background conditions. Although there were no visibly discernable pathways for surface water migration from the landfill, contaminant migration from the site may be possible during heavy rainfall. One of the municipal surface water intakes for the city of Athens is located 2.65 stream miles from the WEC landfill. The municipal system serves approximately 98,800 persons. Other possible explanations for the presence of the inorganic contaminants could be infiltration of surface water runoff to groundwater or the influence of industrial properties located north and adjacent to the swampy region.

The groundwater pathway is not a concern due to the lack of potentially affected targets. However, because the potentially affected population is large for the surface water pathway, and there are potentially affected targets for the surface water, air and onsite pathways, FIT 4 recommends a Listing Site Inspection, Phase I, be conducted at the WEC landfill.

REFERENCES

1. Potential Hazardous Waste Site Preliminary Assessment (EPA Form 2070-12) and attachments for Westinghouse Electric Corporation. Filed by Gilda Knowles, Georgia Department of Natural Resources, September 20, 1985.

2. EPA Notification of Hazardous Waste Site (EPA Form 8900-1) for Westinghouse Electric Corporation, Athens, Clarke County, Georgia. Filed by E.J. Fogel, Plant Manager, December 13, 1988.

3. Samuel R. Pitts, Vice-President, Environmental Affairs, Westinghouse Electric Corporation, Pittsburg, Pennsylvania, letter to USEPA, December 20, 1988. Subject: EPA Notification of Hazardous Waste Site.

4. Will Slater, HWDMS, telephone conversation with R. Hoffmann, NUS Corporation, April 5, 1990. Subject: Interim status of WEC facility.

5. NUS Corporation Field Logbook No. F4-1378 for Westinghouse Electric Corporation, TDD No. F4-8903-40. Documentation of Screening Site Inspection, May 3-4, 1989.

6. Kenneth A. Lucas, "Preliminary Reassessment, Westinghouse Electric Corporation, Athens, Clarke County, Georgia," prepared for the Environmental Protection Agency, March 8, 1989.

7. Charles K. Gorham, Quality Assurance Supervisor, Westinghouse Electric Corporation, letter to George M. Saad, Environmental Engineer, Solid Waste Management Section, Georgia Environmental Protection Division, June 29, 1981. Subject: Liquid wastes generated at Westinghouse.

8. NUS Corporation Field Logbook No. F4-1349 for Westinghouse Electric Corporation, TDD No. F4-8903-40. Documentation of onsite reconnaissance, April 17, 1989.

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10. U.S. Environmental Protection Agency, Graphical Exposure Modeling Systems (GEMS) Data Base, compiled from U.S. Bureau of the Census data (1980).

11. U.S. Department of Commerce, Climatic Atlas of the United States (Washington, D.C.: GPO, June 1968) Reprint: 1983, National Oceanic and Atmospheric Administration.

12. U.S. Department of Commerce, Monthly Normals of Temperature, Precipitation, and Heating and Cooling Degree Days 1951-80 in Georgia (National Climatic Center, Ashville, N.C. 1982), pp. 2, 5.

13. Dean B. Radtke, Charles W. Cressler, Howard A. Pearlman, Harry E. Blanebard, Jr., Keith W. McFadden, and Rebekah Brooks, Occurrence and Availability of Ground Water in the Athens Region, Northeastern Georgia, Water-Resources Investigations Report 86-4075 (U.S. Army Corps of Engineers, 1986), pp. 8-11, plate 1.

14. U.S. Department of Commerce, Rainfall Frequency Atlas of the United States, Technical Paper Number 40 (Washington, D.C.: GPO, 1961).

15. Rebecca Hoffmann, NUS Corporation; memo to file for Westinghouse Electric Corporation, August 12, 1989. Subject: Conversation with Roy Burns, Water Superintendent for Athens Water Department, concerning extent of water lines.

16. J.S. Clarke, S.A. Longsworth, C.N. Joiner, M.F. Peck, K.W. McFadden, and B.J. Milby, Groundwater Data for Georgia, Open File Report 87-367 (Georgia Department of Natural Resources Environmental Protection Division and Georgia Geologic Survey), pp. 4-5.

17. U.S. Geological Survey, National Water Summary: Hydrologic Events, Selected Water Quality Trends, and Ground-Water Resources, Water Supply Paper 2275 (1984), p. 162.

18. NUS Corporation Field Logbook No. F4-1377 for Westinghouse Electric Corporation, TDD No. F4-8904-04. Documentation of geophysical survey, May 3, 1989.

APPENDIX A

<u>**OVERSIZED**</u>

<u>**DOCUMENT**</u>

APPENDIX B

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1550 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
5.0U	SILVER
15U	ARSENIC
NA	BORON
26	BARIUM
2.5U	BERYLLIUM
2.5U	CADMIUM
5.0U	COBALT
29	CHROMIUM
34	COPPER
5.0U	MOLYBDENUM
14	NICKEL
29	LEAD
15U	ANTIMONY
20U	SELENIUM
12U	TIN
5.0U	STRONTIUM
25U	TELLURIUM
940	TITANIUM
50U	THALLIUM
120	VANADIUM
9.7	YTTRIUM
26	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
27000	ALUMINUM
250	MANGANESE

MG/KG	ANALYTICAL RESULTS
250U	CALCIUM
1100	MAGNESIUM
45000	IRON
500U	SODIUM
1100	POTASSIUM
22	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SD-01 BACKGROUND SEDIMENT SOIL COLLECTION START: 05/03/89 1630 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
2.0U	SILVER
6.0U	ARSENIC
NA	BORON
21	BARIUM
1.0U	BERYLLIUM
1.0U	CADMIUM
2.0U	COBALT
15	CHROMIUM
3.9	COPPER
2.0U	MOLYBDENUM
4.0U	NICKEL
6.3	LEAD
6.0U	ANTIMONY
8.0U	SELENIUM
5.0U	TIN
2.0U	STRONTIUM
10U	TELLURIUM
410	TITANIUM
20U	THALLIUM
42	VANADIUM
7.1	YTTRIUM
12	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
4400	ALUMINUM
150	MANGANESE

MG/KG	ANALYTICAL RESULTS
150	CALCIUM
710	MAGNESIUM
16000	IRON
200U	SODIUM
820	POTASSIUM
20	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-01 BACKGROUND SURFACE SOIL COLLECTION START: 05/03/89 1530 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
3.0U	SILVER
9.0U	ARSENIC
NA	BORON
160	BARIUM
1.5U	BERYLLIUM
1.5U	CADMIUM
15	COBALT
14	CHROMIUM
7.5	COPPER
3.0U	MOLYBDENUM
6.0U	NICKEL
25	LEAD
9.0U	ANTIMONY
12U	SELENIUM
7.5U	TIN
3.0U	STRONTIUM
15U	TELLURIUM
1800	TITANIUM
30U	THALLIUM
61	VANADIUM
14	YTTRIUM
53	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
30000	ALUMINUM
800	MANGANESE

MG/KG	ANALYTICAL RESULTS
150U	CALCIUM
8300	MAGNESIUM
26000	IRON
300U	SODIUM
7800	POTASSIUM
19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34899 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-02 SUBSURFACE SOIL #2

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1005 STOP: 00/00/00

ANALYTICAL RESULTS

MG/KG	
7.0U	SILVER
21U	ARSENIC
NA	BORON
90	BARIUM
3.5U	BERYLLIUM
3.5U	CADMIUM
7.0U	COBALT
34	CHROMIUM
22	COPPER
7.0U	MOLYBDENUM
14U	NICKEL
42	LEAD
21U	ANTIMONY
28U	SELENIUM
18U	TIN
7.0U	STRONTIUM
35U	TELLURIUM
1900	TITANIUM
70U	THALLIUM
150	VANADIUM
7.0U	YTTRIUM
31	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
55000	ALUMINUM
310	MANGANESE

ANALYTICAL RESULTS

MG/KG	
580	CALCIUM
2100	MAGNESIUM
53000	IRON
700U	SODIUM
2500	POTASSIUM
21	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

** PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
** STATION ID: SD-02 SEDIMENT SOIL #02 COLLECTION START: 05/03/89 1815 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
6.0U	SILVER	1200	CALCIUM
18U	ARSENIC	1900	MAGNESIUM
NA	BORON	50000	IRON
180	BARIUM	600U	SODIUM
3.0U	BERYLLIUM	1400	POTASSIUM
3.0U	CADMIUM	45	PERCENT MOISTURE
18	COBALT		
47	CHROMIUM		
30	COPPER		
6.0U	MOLYBDENUM		
12U	NICKEL		
45	LEAD		
18U	ANTIMONY		
24U	SELENIUM		
15U	TIN		
12	STRONTIUM		
30U	TELLURIUM		
1000	TITANIUM		
60U	THALLIUM		
120	VANADIUM		
25	YTTRIUM		
57	ZINC		
NA	ZIRCONIUM		
0.05U	MERCURY		
46000	ALUMINUM		
4500	MANGANESE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-02 SURFACE SOIL #02 COLLECTION START: 05/04/89 1020 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
2.0U	SILVER
6.0U	ARSENIC
NA	BORON
92	BARIUM
1.0U	BERYLLIUM
1.0U	CADMIUM
5.9	COBALT
28	CHROMIUM
51	COPPER
2.0U	MOLYBDENUM
6.0	NICKEL
140	LEAD
6.0U	ANTIMONY
8.0U	SELENIUM
5.0U	TIN
8.2	STRONTIUM
10U	TELLURIUM
710	TITANIUM
20U	THALLIUM
43	VANADIUM
13	YTTRIUM
100	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
19000	ALUMINUM
320	MANGANESE

MG/KG	ANALYTICAL RESULTS
2200	CALCIUM
1900	MAGNESIUM
14000	IRON
200U	SODIUM
1800	POTASSIUM
13	PERCENT MOISTURE

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-03 SUBSURFACE SOIL #03 COLLECTION START: 05/04/89 1225 STOP: 00/00/00

ANALYTICAL RESULTS

MG/KG	
5.0U	SILVER
15U	ARSENIC
NA	BORON
60	BARIUM
2.5U	BERYLLIUM
2.5U	CADMIUM
15	COBALT
56	CHROMIUM
13	COPPER
5.0U	MOLYBDENUM
11	NICKEL
21	LEAD
15U	ANTIMONY
20U	SELENIUM
12U	TIN
5.0U	STRONTIUM
25U	TELLURIUM
1200	TITANIUM
50U	THALLIUM
81	VANADIUM
5.0U	YTTRIUM
40	ZINC
NA	ZIRCONIUM
0.1	MERCURY
50000	ALUMINUM
1300	MANGANESE

ANALYTICAL RESULTS

MG/KG	
290	CALCIUM
1200	MAGNESIUM
34000	IRON
500U	SODIUM
1200	POTASSIUM
19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SS-03 SURFACE SOIL #03 COLLECTION START: 05/04/89 1035 STOP: 00/00/00 **
** **
*** ***

MG/KG	ANALYTICAL RESULTS
50U	SILVER
150U	ARSENIC
NA	BORON
130	BARIUM
25U	BERYLLIUM
25U	CADMIUM
50U	COBALT
2400	CHROMIUM
23000	COPPER
50U	MOLYBDENUM
100U	NICKEL
10000	LEAD
150U	ANTIMONY
200U	SELENIUM
120U	TIN
50U	STRONTIUM
250U	TELLURIUM
1100	TITANIUM
500U	THALLIUM
70	VANADIUM
50U	YTTRIUM
3000	ZINC
NA	ZIRCONIUM
0.05	MERCURY
28000	ALUMINUM
500	MANGANESE

MG/KG	ANALYTICAL RESULTS
2500U	CALCIUM
3500	MAGNESIUM
29000	IRON
5000U	SODIUM
10000U	POTASSIUM
33	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-04 SURFACE SOIL #04 COLLECTION START: 05/04/89 1120 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
25U	SILVER
75U	ARSENIC
NA	BORON
9000	BARIUM
12U	BERYLLIUM
12U	CADMIUM
55	COBALT
8700	CHROMIUM
9900	COPPER
25U	MOLYBDENUM
58	NICKEL
9000	LEAD
100	ANTIMONY
100U	SELENIUM
62U	TIN
120	STRONTIUM
120U	TELLURIUM
170	TITANIUM
250U	THALLIUM
46	VANADIUM
25U	YTTRIUM
10000	ZINC
NA	ZIRCONIUM
0.10	MERCURY
18000	ALUMINUM
210	MANGANESE

MG/KG	ANALYTICAL RESULTS
1800	CALCIUM
1000	MAGNESIUM
29000	IRON
2500U	SODIUM
5000U	POTASSIUM
29	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-01 BACKGROUND SURFACE SOIL COLLECTION START: 05/03/89 1530 STOP: 00/00/00

RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-02 SURFACE SOIL #02 COLLECTION START: 05/04/89 1020 STOP: 00/00/00

RESULTS	UNITS	PARAMETER
0.25	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-03 SURFACE SOIL #03

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1035 STOP: 00/00/00

RESULTS	UNITS	PARAMETER
0.300U	MG/KG	CYANIDE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SS-04 SURFACE SOIL #04 COLLECTION START: 05/04/89 1120 STOP: 00/00/00 **
** **
*** ***

RESULTS	UNITS	PARAMETER
1.2	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL COLLECTION START: 05/03/89 1550 STOP: 00/00/00 **
** **
*** ***

RESULTS	UNITS	PARAMETER
0.26U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34899 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-02 SUBSURFACE SOIL #2

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1005 STOP: 00/00/00

RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 89-400    SAMPLE NO. 34903  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R YOUNG                        **
**   SOURCE: WESTINGHOUSE ELECT.                                      CITY: ATHENS                 ST: GA                           **
**   STATION ID: SB-03 SUBSURFACE SOIL #03                            COLLECTION START: 05/04/89  1225   STOP: 00/00/00             **
**                                                                                                                                  **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
0.33	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SD-01 BACKGROUND SEDIMENT SOIL COLLECTION START: 05/03/89 1630 STOP: 00/00/00 **
** **
*** ***

RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 89-400    SAMPLE NO. 34907  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R YOUNG                     **
**   SOURCE: WESTINGHOUSE ELECT.                                      CITY: ATHENS                  ST: GA                       **
**   STATION ID: SD-02 SEDIMENT SOIL #02                              COLLECTION START: 05/03/89  1815   STOP: 00/00/00          **
**                                                                                                                               **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
0.36U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT — 06/13/89

PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-01 BACKGROUND SURFACE SOIL COLLECTION START: 05/03/89 1530 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
39U	CHLOROMETHANE	39U	CIS 1,3-DICHLOROPROPENE
39U	VINYL CHLORIDE	390U	METHYL ISOBUTYL KETONE
39U	BROMOMETHANE	39U	TOLUENE
39U	CHLOROETHANE	39U	TRANS-1,3 DICHLOROPROPENE
39U	TRICHLOROFLUOROMETHANE	39U	1,1,2-TRICHLOROETHANE
39U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	39U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
390U	ACETONE	39U	1,3-DICHLOROPROPANE
390U	CARBON DISULFIDE	390U	METHYL BUTYL KETONE
39U	METHYLENE CHLORIDE	39U	DIBROMOCHLOROMETHANE
39U	TRANS-1,2-DICHLOROETHENE	39U	CHLOROBENZENE
39U	1,1-DICHLOROETHANE	39U	1,1,1,2-TETRACHLOROETHANE
390U	VINYL ACETATE	39U	ETHYL BENZENE
39U	CIS-1,2-DICHLOROETHENE	39U	(M- AND/OR P-)XYLENE
39U	2,2-DICHLOROPROPANE	39U	O-XYLENE
390U	METHYL ETHYL KETONE	39U	STYRENE
39U	BROMOCHLOROMETHANE	39U	BROMOFORM
39U	CHLOROFORM	39U	BROMOBENZENE
39U	1,1,1-TRICHLOROETHANE	39U	1,1,2,2-TETRACHLOROETHANE
39U	1,1 DICHLOROPROPENE	39U	1,2,3-TRICHLOROPROPANE
39U	CARBON TETRACHLORIDE	39U	O-CHLOROTOLUENE
39U	1,2-DICHLOROETHANE	39U	P-CHLOROTOLUENE
39U	BENZENE	39U	1,3-DICHLOROBENZENE
39U	TRICHLOROETHENE(TRICHLOROETHYLENE)	39U	1,4-DICHLOROBENZENE
39U	1,2-DICHLOROPROPANE	39U	1,2-DICHLOROBENZENE
39U	DIBROMOMETHANE	19.0	PERCENT MOISTURE
39U	BROMODICHLOROMETHANE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/30/89

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-02 SURFACE SOIL #02

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1020 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
41U	CHLOROMETHANE	41U	CIS-1,3-DICHLOROPROPENE
41U	VINYL CHLORIDE	410U	METHYL ISOBUTYL KETONE
41U	BROMOMETHANE	41U	TOLUENE
41U	CHLOROETHANE	41U	TRANS-1,3-DICHLOROPROPENE
41U	TRICHLOROFLUOROMETHANE	41U	1,1,2-TRICHLOROETHANE
41U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	41U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
410U	ACETONE	41U	1,3-DICHLOROPROPANE
410U	CARBON DISULFIDE	410U	METHYL BUTYL KETONE
41U	METHYLENE CHLORIDE	41U	DIBROMOCHLOROMETHANE
41U	TRANS-1,2-DICHLOROETHENE	41U	CHLOROBENZENE
41U	1,1-DICHLOROETHANE	41U	1,1,1,2-TETRACHLOROETHANE
410U	VINYL ACETATE	41U	ETHYL BENZENE
41U	CIS-1,2-DICHLOROETHENE	41U	(M- AND/OR P-)XYLENE
41U	2,2-DICHLOROPROPANE	41U	O-XYLENE
410U	METHYL ETHYL KETONE	41U	STYRENE
41U	BROMOCHLOROMETHANE	41U	BROMOFORM
41U	CHLOROFORM	41U	BROMOBENZENE
41U	1,1,1-TRICHLOROETHANE	41U	1,1,2,2-TETRACHLOROETHANE
41U	1,1-DICHLOROPROPENE	41U	1,2,3-TRICHLOROPROPANE
41U	CARBON TETRACHLORIDE	41U	O-CHLOROTOLUENE
41U	1,2-DICHLOROETHANE	41U	P-CHLOROTOLUENE
41U	BENZENE	41U	1,3-DICHLOROBENZENE
41U	TRICHLOROETHENE(TRICHLOROETHYLENE)	41U	1,4-DICHLOROBENZENE
41U	1,2-DICHLOROPROPANE	41U	1,2-DICHLOROBENZENE
41U	DIBROMOMETHANE	14.0	PERCENT MOISTURE
41U	BROMODICHLOROMETHANE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 05/30/89

PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-03 SURFACE SOIL #03

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1035 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
160U	CHLOROMETHANE	160U	CIS-1,3-DICHLOROPROPENE
160U	VINYL CHLORIDE	1600U	METHYL ISOBUTYL KETONE
160U	BROMOMETHANE	160U	TOLUENE
160U	CHLOROETHANE	160U	TRANS-1,3-DICHLOROPROPENE
160U	TRICHLOROFLUOROMETHANE	160U	1,1,2-TRICHLOROETHANE
160U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	160U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
1600U	ACETONE	160U	1,3-DICHLOROPROPANE
1600U	CARBON DISULFIDE	1600U	METHYL BUTYL KETONE
160U	METHYLENE CHLORIDE	160U	DIBROMOCHLOROMETHANE
160U	TRANS-1,2-DICHLOROETHENE	160U	CHLOROBENZENE
160U	1,1-DICHLOROETHANE	160U	1,1,1,2-TETRACHLOROETHANE
1600U	VINYL ACETATE	160U	ETHYL BENZENE
160U	CIS-1,2-DICHLOROETHENE	160U	(M- AND/OR P-)XYLENE
160U	2,2-DICHLOROPROPANE	81J	O-XYLENE
1600U	METHYL ETHYL KETONE	160U	STYRENE
160U	BROMOCHLOROMETHANE	160U	BROMOFORM
160U	CHLOROFORM	160U	BROMOBENZENE
160U	1,1,1-TRICHLOROETHANE	160U	1,1,2,2-TETRACHLOROETHANE
160U	1,1-DICHLOROPROPENE	160U	1,2,3-TRICHLOROPROPANE
160U	CARBON TETRACHLORIDE	160U	O-CHLOROTOLUENE
160U	1,2-DICHLOROETHANE	160U	P-CHLOROTOLUENE
160U	BENZENE	160U	1,3-DICHLOROBENZENE
160U	TRICHLOROETHENE(TRICHLOROETHYLENE)	160U	1,4-DICHLOROBENZENE
160U	1,2-DICHLOROPROPANE	160U	1,2-DICHLOROBENZENE
160U	DIBROMOMETHANE	33.0	PERCENT MOISTURE
160U	BROMODICHLOROMETHANE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/30/89

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

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*************************************************************************************************
**  PROJECT NO. 89-400    SAMPLE NO. 34901  SAMPLE TYPE: SOIL      PROG ELEM: NSF   COLLECTED BY: R YOUNG        **
**  SOURCE: WESTINGHOUSE ELECT.                                     CITY: ATHENS               ST: GA             **
**  STATION ID: SS-03 SURFACE SOIL #03                              COLLECTION START: 05/04/89  1035   STOP: 00/00/00 **
**                                                                                                                 **
*************************************************************************************************
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ANALYTICAL RESULTS UG/KG

200JN	TRIMETHYLBENZENE
N	PETROLEUM PRODUCT

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 06/13/89

PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-04 SURFACE SOIL #04 COLLECTION START: 05/04/89 1120 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
930000U	CHLOROMETHANE	930000U	CIS 1,3-DICHLOROPROPENE
930000U	VINYL CHLORIDE	9.3E6U	METHYL ISOBUTYL KETONE
930000U	BROMOMETHANE	930000U	TOLUENE
930000U	CHLOROETHANE	930000U	TRANS-1,3 DICHLOROPROPENE
930000U	TRICHLOROFLUOROMETHANE	930000U	1,1,2-TRICHLOROETHANE
930000U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	930000U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
9.3E6U	ACETONE	930000U	1,3-DICHLOROPROPANE
9.3E6U	CARBON DISULFIDE	9.3E6U	METHYL BUTYL KETONE
930000U	METHYLENE CHLORIDE	930000U	DIBROMOCHLOROMETHANE
930000U	TRANS-1,2-DICHLOROETHENE	930000U	CHLOROBENZENE
930000U	1,1-DICHLOROETHANE	1.9E6U	1,1,1,2-TETRACHLOROETHANE
9.3E6U	VINYL ACETATE	1.1E6	ETHYL BENZENE
930000U	CIS-1,2-DICHLOROETHENE	1.7E7	(M- AND/OR P-)XYLENE
930000U	2,2-DICHLOROPROPANE	5.4E6	O-XYLENE
9.3E6U	METHYL ETHYL KETONE	1.9E6U	STYRENE
930000U	BROMOCHLOROMETHANE	930000U	BROMOFORM
930000U	CHLOROFORM	1.9E6U	BROMOBENZENE
930000U	1,1,1-TRICHLOROETHANE	930000U	1,1,2,2-TETRACHLOROETHANE
930000U	1,1 DICHLOROPROPENE	1.9E6U	1,2,3-TRICHLOROPROPANE
930000U	CARBON TETRACHLORIDE	1.9E6U	O-CHLOROTOLUENE
930000U	1,2-DICHLOROETHANE	1.9E6U	P CHLOROTOLUENE
930000U	BENZENE	1.9E6U	1,3-DICHLOROBENZENE
930000U	TRICHLOROETHENE(TRICHLOROETHYLENE)	1.9E6U	1,4-DICHLOROBENZENE
930000U	1,2-DICHLOROPROPANE	1.9E6U	1,2-DICHLOROBENZENE
930000U	DIBROMOMETHANE	40.0	PERCENT MOISTURE
930000U	BROMODICHLOROMETHANE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/13/89

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

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**   PROJECT NO. 89-400   SAMPLE NO. 34902  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R YOUNG                **
**   SOURCE: WESTINGHOUSE ELECT.                                      CITY: ATHENS                ST: GA                    **
**   STATION ID: SS-04 SURFACE SOIL #04                               COLLECTION START: 05/04/89  1120   STOP: 00/00/00     **
**                                                                                                                          **
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ANALYTICAL RESULTS UG/KG

560JN   TRIMETHYLBENZENE (3 ISOMERS)

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-01 BACKGROUND SURFACE SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1530 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
1700U	BIS(2 CHLOROETHYL) ETHER
1700U	BIS(2-CHLOROISOPROPYL) ETHER
1700U	N-NITROSODI-N-PROPYLAMINE
1700U	HEXACHLOROETHANE
1700U	NITROBENZENE
1700U	ISOPHORONE
1700U	BIS(2-CHLOROETHOXY) METHANE
1700U	1,2,4-TRICHLOROBENZENE
1700U	NAPHTHALENE
1700U	4-CHLOROANILINE
1700U	HEXACHLOROBUTADIENE
1700U	2-METHYLNAPHTHALENE
1700U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1700U	2-CHLORONAPHTHALENE
1700U	2-NITROANILINE
1700U	DIMETHYL PHTHALATE
1700U	ACENAPHTHYLENE
1700U	2,6-DINITROTOLUENE
1700U	3-NITROANILINE
1700U	ACENAPHTHENE
1700U	DIBENZOFURAN
1700U	2,4-DINITROTOLUENE
1700U	DIETHYL PHTHALATE
1700U	FLUORENE
1700U	4-CHLOROPHENYL PHENYL ETHER
1700U	4-NITROANILINE
1700U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1700U	4-BROMOPHENYL PHENYL ETHER
1700U	HEXACHLOROBENZENE (HCB)
1700U	PHENANTHRENE
1700U	ANTHRACENE
1700U	DI-N-BUTYLPHTHALATE

UG/KG	ANALYTICAL RESULTS
1700U	FLUORANTHENE
1700U	PYRENE
1700U	BENZYL BUTYL PHTHALATE
1700U	3,3'-DICHLOROBENZIDINE
1700U	BENZO(A)ANTHRACENE
1700U	CHRYSENE
1700U	BIS(2-ETHYLHEXYL) PHTHALATE
1700U	DI-N-OCTYLPHTHALATE
1700U	BENZO(B AND/OR K)FLUORANTHENE
1700U	BENZO-A-PYRENE
1700U	INDENO (1,2,3-CD) PYRENE
1700U	DIBENZO(A,H)ANTHRACENE
1700U	BENZO(GHI)PERYLENE
1700U	PHENOL
1700U	2-CHLOROPHENOL
3300U	BENZYL ALCOHOL
1700U	2-METHYLPHENOL
1700U	(3-AND/OR 4-)METHYLPHENOL
1700U	2-NITROPHENOL
1700U	2,4-DIMETHYLPHENOL
3300U	BENZOIC ACID
1700U	2,4-DICHLOROPHENOL
1700U	4-CHLORO-3-METHYLPHENOL
1700U	2,4,6-TRICHLOROPHENOL
1700U	2,4,5-TRICHLOROPHENOL
3300U	2,4-DINITROPHENOL
3300U	4-NITROPHENOL
1700U	2,3,4,6-TETRACHLOROPHENOL
3300U	2-METHYL-4,6-DINITROPHENOL
3300U	PENTACHLOROPHENOL
19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO 89-400    SAMPLE NO. 34904  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R YOUNG                  **
**   SOURCE: WESTINGHOUSE ELECT.                                     CITY: ATHENS               ST: GA                       **
**   STATION ID: SS-01 BACKGROUND SURFACE SOIL                       COLLECTION START: 05/03/89  1530   STOP: 00/00/00       **
**                                                                                                                           **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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ANALYTICAL RESULTS UG/KG

1000JN HEXADECANOIC ACID

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 06/08/89

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-02 SURFACE SOIL #02 COLLECTION START: 05/04/89 1020 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
16000U	BIS(2-CHLOROETHYL) ETHER	78000	FLUORANTHENE
16000U	BIS(2-CHLOROISOPROPYL) ETHER	67000	PYRENE
16000U	N-NITROSODI-N-PROPYLAMINE	16000U	BENZYL BUTYL PHTHALATE
16000U	HEXACHLOROETHANE	16000U	3,3'-DICHLOROBENZIDINE
16000U	NITROBENZENE	28000	BENZO(A)ANTHRACENE
16000U	ISOPHORONE	25000	CHRYSENE
16000U	BIS(2-CHLOROETHOXY) METHANE	16000U	BIS(2-ETHYLHEXYL) PHTHALATE
16000U	1,2,4-TRICHLOROBENZENE	16000U	DI-N-OCTYLPHTHALATE
16000U	NAPHTHALENE	51000	BENZO(B AND/OR K)FLUORANTHENE
16000U	4-CHLOROANILINE	24000	BENZO-A-PYRENE
16000U	HEXACHLOROBUTADIENE	10000J	INDENO (1,2,3-CD) PYRENE
16000U	2-METHYLNAPHTHALENE	3700J	DIBENZO(A,H)ANTHRACENE
16000U	HEXACHLOROCYCLOPENTADIENE (HCCP)	9500J	BENZO(GHI)PERYLENE
16000U	2-CHLORONAPHTHALENE	16000U	PHENOL
16000U	2-NITROANILINE	16000U	2-CHLOROPHENOL
16000U	DIMETHYL PHTHALATE	31000U	BENZYL ALCOHOL
2800J	ACENAPHTHYLENE	16000U	2-METHYLPHENOL
16000U	2,6-DINITROTOLUENE	16000U	(3-AND/OR 4-)METHYLPHENOL
16000U	3-NITROANILINE	16000U	2-NITROPHENOL
16000U	ACENAPHTHENE	16000U	2,4-DIMETHYLPHENOL
16000U	DIBENZOFURAN	31000U	BENZOIC ACID
16000U	2,4-DINITROTOLUENE	16000U	2,4-DICHLOROPHENOL
16000U	DIETHYL PHTHALATE	16000U	4-CHLORO-3-METHYLPHENOL
16000U	FLUORENE	16000U	2,4,6-TRICHLOROPHENOL
16000U	4-CHLOROPHENYL PHENYL ETHER	16000U	2,4,5-TRICHLOROPHENOL
16000U	4-NITROANILINE	31000U	2,4-DINITROPHENOL
16000U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE	31000U	4-NITROPHENOL
16000U	4-BROMOPHENYL PHENYL ETHER	16000U	2,3,4,6-TETRACHLOROPHENOL
16000U	HEXACHLOROBENZENE (HCB)	31000U	2-METHYL-4,6-DINITROPHENOL
16000	PHENANTHRENE	31000U	PENTACHLOROPHENOL
5200J	ANTHRACENE	14	PERCENT MOISTURE
16000U	DI-N-BUTYLPHTHALATE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SS-02 SURFACE SOIL #02 COLLECTION START: 05/04/89 1020 STOP: 00/00/00 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

2000JN	(DIMETHYLBUTENYLIDENE)BISBENZENE
2000JN	METHYLPHENANTHRENE
6000JN	CYCLOPENTAPHENANTHRENE
3000JN	PHENYLNAPHTHALENE
2000JN	BIS(BUTADIYNEDIYL)BENZENE
9000JN	BENZONAPHTHOFURAN (3 ISOMERS)
3000JN	PHENANTHRENECARBONITRILE
20000JN	METHYLFLUORANTHENE (4 ISOMERS)
8000JN	BENZOFLUORENE
7000JN	BENZONAPHTHOTHIOPHENE
40000JN	BENZOFLUORANTHENE (NOT B OR K) (2 ISOMERS)
200000J	2 UNIDENTIFIED COMPOUNDS
2000JN	BENZOPHENANTHRENONE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400   SAMPLE NO. 34901   SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-03 SURFACE SOIL #03

PROG ELEM: NSF   COLLECTED BY: R YOUNG
CITY: ATHENS   ST: GA
COLLECTION START: 05/04/89 1035   STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
20000U	BIS(2 CHLOROETHYL) ETHER
20000U	BIS(2-CHLOROISOPROPYL) ETHER
20000U	N-NITROSODI-N-PROPYLAMINE
20000U	HEXACHLOROETHANE
20000U	NITROBENZENE
20000U	ISOPHORONE
20000U	BIS(2-CHLOROETHOXY) METHANE
20000U	1,2,4-TRICHLOROBENZENE
20000U	NAPHTHALENE
20000U	4-CHLOROANILINE
20000U	HEXACHLOROBUTADIENE
20000U	2-METHYLNAPHTHALENE
20000U	HEXACHLOROCYCLOPENTADIENE (HCCP)
20000U	2-CHLORONAPHTHALENE
20000U	2-NITROANILINE
20000U	DIMETHYL PHTHALATE
20000U	ACENAPHTHYLENE
20000U	2,6-DINITROTOLUENE
20000U	3-NITROANILINE
20000U	ACENAPHTHENE
20000U	DIBENZOFURAN
20000U	2,4-DINITROTOLUENE
20000U	DIETHYL PHTHALATE
20000U	FLUORENE
20000U	4-CHLOROPHENYL PHENYL ETHER
20000U	4-NITROANILINE
20000U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20000U	4-BROMOPHENYL PHENYL ETHER
20000U	HEXACHLOROBENZENE (HCB)
20000U	PHENANTHRENE
20000U	ANTHRACENE
20000U	DI-N-BUTYLPHTHALATE

UG/KG	ANALYTICAL RESULTS
20000U	FLUORANTHENE
20000U	PYRENE
20000U	BENZYL BUTYL PHTHALATE
20000U	3,3'-DICHLOROBENZIDINE
20000U	BENZO(A)ANTHRACENE
20000U	CHRYSENE
20000U	BIS(2-ETHYLHEXYL) PHTHALATE
20000U	DI-N-OCTYLPHTHALATE
20000U	BENZO(B AND/OR K)FLUORANTHENE
20000U	BENZO-A-PYRENE
20000U	INDENO (1,2,3-CD) PYRENE
20000U	DIBENZO(A,H)ANTHRACENE
20000U	BENZO(GHI)PERYLENE
20000U	PHENOL
20000U	2-CHLOROPHENOL
40000U	BENZYL ALCOHOL
20000U	2-METHYLPHENOL
20000U	(3-AND/OR 4-)METHYLPHENOL
20000U	2-NITROPHENOL
20000U	2,4-DIMETHYLPHENOL
40000U	BENZOIC ACID
20000U	2,4-DICHLOROPHENOL
20000U	4-CHLORO-3-METHYLPHENOL
20000U	2,4,6-TRICHLOROPHENOL
20000U	2,4,5-TRICHLOROPHENOL
40000U	2,4-DINITROPHENOL
40000U	4-NITROPHENOL
20000U	2,3,4,6-TETRACHLOROPHENOL
40000U	2-METHYL-4,6-DINITROPHENOL
40000U	PENTACHLOROPHENOL
33	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-03 SURFACE SOIL #03 COLLECTION START: 05/04/89 1035 STOP: 00/00/00

ANALYTICAL RESULTS UG/KG

5000JN	METHYLPROPYLBENZENE
9000JN	DIETHYLMETHYLBENZENE (2 ISOMERS)
6000JN	(DIMETHYLPROPYL)BENZENE
10000JN	DIMETHYL(METHYLETHYL)BENZENE (2 ISOMERS)
4000JN	ETHYLTRIMETHYLBENZENE
6000JN	HEXANOIC ACID
3000JN	COPAENE
40000JN	HEPTADECANOL (2 ISOMERS)
200000JN	TETRADECANOIC ACID
40000JN	PENTADECANOIC ACID
40000JN	TETRADECANAL
2E6JN	HEXADECANOIC ACID
2E6J	11 UNIDENTIFIED COMPOUNDS
100000JN	HEPTADECANOIC ACID
700000JN	OCTADECANOIC ACID
N	PETROLEUM PRODUCT
40000JN	ETHYLDIMETHYLBENZENE (5 ISOMERS)

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-04 SURFACE SOIL #04

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1120 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
88000U	BIS(2 CHLOROETHYL) ETHER	88000U	FLUORANTHENE
88000U	BIS(2-CHLOROISOPROPYL) ETHER	88000U	PYRENE
88000U	N-NITROSODI-N-PROPYLAMINE	88000U	BENZYL BUTYL PHTHALATE
88000U	HEXACHLOROETHANE	88000U	3,3'-DICHLOROBENZIDINE
88000U	NITROBENZENE	88000U	BENZO(A)ANTHRACENE
88000U	ISOPHORONE	88000U	CHRYSENE
88000U	BIS(2-CHLOROETHOXY) METHANE	88000U	BIS(2-ETHYLHEXYL) PHTHALATE
88000U	1,2,4-TRICHLOROBENZENE	88000U	DI-N-OCTYLPHTHALATE
620000	NAPHTHALENE	88000U	BENZO(B AND/OR K)FLUORANTHENE
88000U	4-CHLOROANILINE	88000U	BENZO-A-PYRENE
88000U	HEXACHLOROBUTADIENE	88000U	INDENO (1,2,3-CD) PYRENE
240000	2-METHYLNAPHTHALENE	88000U	DIBENZO(A,H)ANTHRACENE
88000U	HEXACHLOROCYCLOPENTADIENE (HCCP)	88000U	BENZO(GHI)PERYLENE
88000U	2-CHLORONAPHTHALENE	88000U	PHENOL
88000U	2-NITROANILINE	88000U	2-CHLOROPHENOL
88000U	DIMETHYL PHTHALATE	180000U	BENZYL ALCOHOL
88000U	ACENAPHTHYLENE	88000U	2-METHYLPHENOL
88000U	2,6-DINITROTOLUENE	88000U	(3-AND/OR 4-)METHYLPHENOL
88000U	3-NITROANILINE	88000U	2-NITROPHENOL
88000U	ACENAPHTHENE	88000U	2,4-DIMETHYLPHENOL
88000U	DIBENZOFURAN	180000U	BENZOIC ACID
88000U	2,4-DINITROTOLUENE	88000U	2,4-DICHLOROPHENOL
88000U	DIETHYL PHTHALATE	88000U	4-CHLORO-3-METHYLPHENOL
88000U	FLUORENE	88000U	2,4,6-TRICHLOROPHENOL
88000U	4-CHLOROPHENYL PHENYL ETHER	88000U	2,4,5-TRICHLOROPHENOL
88000U	4-NITROANILINE	180000	2,4-DINITROPHENOL
88000U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE	180000	4-NITROPHENOL
88000U	4-BROMOPHENYL PHENYL ETHER	88000U	2,3,4,6-TETRACHLOROPHENOL
88000U	HEXACHLOROBENZENE (HCB)	180000U	2-METHYL-4,6-DINITROPHENOL
13000J	PHENANTHRENE	180000U	PENTACHLOROPHENOL
88000U	ANTHRACENE	40	PERCENT MOISTURE
88000U	DI-N-BUTYLPHTHALATE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-04 SURFACE SOIL #04

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1120 STOP: 00/00/00

ANALYTICAL RESULTS UG/KG

10000JN	PROPYLCYCLOHEXANE
30000JN	PROPYLBENZENE
200000JN	ETHYLMETHYLBENZENE (3 ISOMERS)
900000JN	TRIMETHYLBENZENE (3 ISOMERS)
N	PETROLEUM PRODUCT
20000JN	(METHYLPROPYL)BENZENE
200000JN	PROPENYLCYCLOHEXANE
100000JN	DIHYDROINDENE
900000JN	METHYLPROPYLBENZENE
600000JN	BUTYLBENZENE
6E6JN	ETHYLDIMETHYLBENZENE (7 ISOMERS)
1E6JN	(DIMETHYLPROPYL)BENZENE (6 ISOMERS)
100000JN	DIETHYLMETHYLBENZENE
20000JN	METHYLDECAHYDRONAPHTHALENE
30000JN	PENTYLCYCLOHEXANE
700000JN	METHYLDIHYDROINDENE
1E6JN	DIMETHYL(METHYLETHYL)BENZENE (6 ISOMERS)
1E6JN	DIETHYLBENZENE
2E6J	10 UNIDENTIFIED COMPOUNDS
200000JN	TETRAHYDRONAPHTHALENE
100000JN	[(METHYLBENZYL)SULFONYL]PHENOL
200000JN	DIMETHYLDIHYDROINDENE (2 ISOMERS)
90000JN	DIMETHYL(METHYLPROPYL)BENZENE (2 ISOMERS)
100000JN	ETHYLTRIMETHYLBENZENE
60000JN	1-METHYLNAPHTHALENE
20000JN	DIMETHYLNAPHTHALENE
100000JN	HEXAMETHYLOCTAHYDROINDENE
100000JN	BIS(DIMETHYLETHYL)METHYLPHENOL
20000JN	TRIMETHYLNAPATHALENE (2 ISOMERS)
30000JN	METHYL(METHYLETHYL)NAPHTHALENE
200000JN	TETRADECANOIC ACID
30000JN	DIMETHYLPHENANTHRENE
1E6JN	HEXADECENOIC ACID
4E6JN	HEXADECANOIC ACID
1E6JN	OCTADECANOIC ACID
2E6JN	ETHYL(METHYLETHYL)BENZENE
50000JN	METHYLPROPYLCYCLOHEXANE (2 ISOMERS)

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/14/89

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-01 BACKGROUND SURFACE SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1530 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
8.1UJ	ALDRIN	62UJ	PCB-1232 (AROCLOR 1232)
8.1UJ	HEPTACHLOR	62UJ	PCB-1248 (AROCLOR 1248)
8.1UJ	HEPTACHLOR EPOXIDE	62UJ	PCB-1260 (AROCLOR 1260)
8.1UJ	ALPHA-BHC	62UJ	PCB-1016 (AROCLOR 1016)
8.1UJ	BETA-BHC	310UJ	TOXAPHENE
8.1UJ	GAMMA BHC (LINDANE)	---	CHLORDENE /2
8.1UJ	DELTA-BHC	---	ALPHA-CHLORDENE /2
8.1UJ	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
8.1UJ	DIELDRIN	---	GAMMA-CHLORDENE /2
8.1UJ	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
8.1UJ	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
8.1UJ	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
8.1UJ	ENDRIN	---	ALPHA-CHLORDANE /2
8.1UJ	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
8.1UJ	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
42UJ	CHLORDANE (TECH. MIXTURE) /1	19UJ	METHOXYCHLOR
62UJ	PCB-1242 (AROCLOR 1242)	8.1UJ	ENDRIN KETONE
62UJ	PCB-1254 (AROCLOR 1254)	19	PERCENT MOISTURE
62UJ	PCB-1221 (AROCLOR 1221)		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-02 SURFACE SOIL #02

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1020 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
22U	ALDRIN
22U	HEPTACHLOR
22U	HEPTACHLOR EPOXIDE
22U	ALPHA-BHC
22U	BETA-BHC
22U	GAMMA BHC (LINDANE)
22U	DELTA-BHC
22U	ENDOSULFAN I (ALPHA)
50U	DIELDRIN
22U	4,4'-DDT (P,P'-DDT)
22U	4,4'-DDE (P,P'-DDE)
22U	4,4'-DDD (P,P'-DDD)
22U	ENDRIN
22U	ENDOSULFAN II (BETA)
310U	ENDOSULFAN SULFATE
97U	CHLORDANE (TECH. MIXTURE) /1
210U	PCB-1242 (AROCLOR 1242)
210U	PCB-1254 (AROCLOR 1254)
210U	PCB-1221 (AROCLOR 1221)

UG/KG	ANALYTICAL RESULTS
210U	PCB-1232 (AROCLOR 1232)
210U	PCB-1248 (AROCLOR 1248)
210U	PCB-1260 (AROCLOR 1260)
210U	PCB-1016 (AROCLOR 1016)
1400U	TOXAPHENE
---	CHLORDENE /2
---	ALPHA-CHLORDENE /2
---	BETA CHLORDENE /2
---	GAMMA-CHLORDENE /2
---	1-HYDROXYCHLORDENE /2
---	GAMMA-CHLORDANE /2
---	TRANS-NONACHLOR /2
---	ALPHA-CHLORDANE /2
---	CIS-NONACHLOR /2
---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
79U	METHOXYCHLOR
33U	ENDRIN KETONE
14	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/14/89

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-03 SURFACE SOIL #03 COLLECTION START: 05/04/89 1035 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
48	ALDRIN	1000U	PCB-1232 (AROCLOR 1232)
86U	HEPTACHLOR	1000U	PCB-1248 (AROCLOR 1248)
28U	HEPTACHLOR EPOXIDE	350JN	PCB-1260 (AROCLOR 1260)
28U	ALPHA-BHC	1000U	PCB-1016 (AROCLOR 1016)
160U	BETA-BHC	1500U	TOXAPHENE
44U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
28U	DELTA-BHC	---	ALPHA-CHLORDENE /2
60U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
43J	DIELDRIN	---	GAMMA-CHLORDENE /2
28U	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
66U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
74	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
48U	ENDRIN	---	ALPHA-CHLORDANE /2
48U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
48U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
250U	CHLORDANE (TECH. MIXTURE) /1	68U	METHOXYCHLOR
1100	PCB-1242 (AROCLOR 1242)	28U	ENDRIN KETONE
300U	PCB-1254 (AROCLOR 1254)	33	PERCENT MOISTURE
1000U	PCB-1221 (AROCLOR 1221)		

REMARKS ***REMARKS***

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/14/89

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-04 SURFACE SOIL #04

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1120 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
23	ALDRIN	440U	PCB-1232 (AROCLOR 1232)
33U	HEPTACHLOR	440U	PCB-1248 (AROCLOR 1248)
41U	HEPTACHLOR EPOXIDE	440U	PCB-1260 (AROCLOR 1260)
41U	ALPHA-BHC	440U	PCB-1016 (AROCLOR 1016)
41U	BETA-BHC	1600U	TOXAPHENE
41U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
41U	DELTA-BHC	---	ALPHA-CHLORDENE /2
41U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
66	DIELDRIN	---	GAMMA-CHLORDENE /2
79U	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
94U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
79U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
79U	ENDRIN	---	ALPHA-CHLORDANE /2
79U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
150U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
220U	CHLORDANE (TECH. MIXTURE) /1	250U	METHOXYCHLOR
440U	PCB-1242 (AROCLOR 1242)	100U	ENDRIN KETONE
440U	PCB-1254 (AROCLOR 1254)	40	PERCENT MOISTURE
440U	PCB-1221 (AROCLOR 1221)		

REMARKS ***REMARKS***

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 06/13/89

PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL COLLECTION START: 05/03/89 1550 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
46U	CHLOROMETHANE	46U	CIS-1,3-DICHLOROPROPENE
46U	VINYL CHLORIDE	460U	METHYL ISOBUTYL KETONE
46U	BROMOMETHANE	46U	TOLUENE
46U	CHLOROETHANE	46U	TRANS-1,3 DICHLOROPROPENE
46U	TRICHLOROFLUOROMETHANE	46U	1,1,2-TRICHLOROETHANE
46U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	46U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
460U	ACETONE	46U	1,3-DICHLOROPROPANE
460U	CARBON DISULFIDE	460U	METHYL BUTYL KETONE
46U	METHYLENE CHLORIDE	46U	DIBROMOCHLOROMETHANE
46U	TRANS-1,2-DICHLOROETHENE	46U	CHLOROBENZENE
46U	1,1-DICHLOROETHANE	46U	1,1,1,2-TETRACHLOROETHANE
460U	VINYL ACETATE	46U	ETHYL BENZENE
46U	CIS-1,2-DICHLOROETHENE	46U	(M- AND/OR P-)XYLENE
46U	2,2-DICHLOROPROPANE	46U	O-XYLENE
460U	METHYL ETHYL KETONE	46U	STYRENE
46U	BROMOCHLOROMETHANE	46U	BROMOFORM
46U	CHLOROFORM	46U	BROMOBENZENE
46U	1,1,1-TRICHLOROETHANE	46U	1,1,2,2-TETRACHLOROETHANE
46U	1,1-DICHLOROPROPENE	46U	1,2,3-TRICHLOROPROPANE
46U	CARBON TETRACHLORIDE	46U	O-CHLOROTOLUENE
46U	1,2-DICHLOROETHANE	46U	P-CHLOROTOLUENE
46U	BENZENE	46U	1,3-DICHLOROBENZENE
46U	TRICHLOROETHENE(TRICHLOROETHYLENE)	46U	1,4-DICHLOROBENZENE
46U	1,2-DICHLOROPROPANE	46U	1,2-DICHLOROBENZENE
46U	DIBROMOMETHANE	21.0	PERCENT MOISTURE
46U	BROMODICHLOROMETHANE		

REMARKS ***REMARKS***

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 05/30/89

PROJECT NO. 89-400 SAMPLE NO. 34899 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-02 SUBSURFACE SOIL #2 COLLECTION START: 05/04/89 1005 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
41U	CHLOROMETHANE	41U	CIS-1,3-DICHLOROPROPENE
41U	VINYL CHLORIDE	410U	METHYL ISOBUTYL KETONE
41U	BROMOMETHANE	41U	TOLUENE
41U	CHLOROETHANE	41U	TRANS-1,3-DICHLOROPROPENE
41U	TRICHLOROFLUOROMETHANE	41U	1,1,2-TRICHLOROETHANE
41U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	41U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
410U	ACETONE	41U	1,3-DICHLOROPROPANE
410U	CARBON DISULFIDE	410U	METHYL BUTYL KETONE
41U	METHYLENE CHLORIDE	41U	DIBROMOCHLOROMETHANE
41U	TRANS-1,2-DICHLOROETHENE	41U	CHLOROBENZENE
41U	1,1-DICHLOROETHANE	41U	1,1,1,2-TETRACHLOROETHANE
410U	VINYL ACETATE	41U	ETHYL BENZENE
41U	CIS-1,2-DICHLOROETHENE	41U	(M- AND/OR P-)XYLENE
41U	2,2-DICHLOROPROPANE	41U	O-XYLENE
410U	METHYL ETHYL KETONE	41U	STYRENE
41U	BROMOCHLOROMETHANE	41U	BROMOFORM
41U	CHLOROFORM	41U	BROMOBENZENE
41U	1,1,1-TRICHLOROETHANE	41U	1,1,2,2-TETRACHLOROETHANE
41U	1,1-DICHLOROPROPENE	41U	1,2,3-TRICHLOROPROPANE
41U	CARBON TETRACHLORIDE	41U	O-CHLOROTOLUENE
41U	1,2-DICHLOROETHANE	41U	P-CHLOROTOLUENE
41U	BENZENE	41U	1,3-DICHLOROBENZENE
41U	TRICHLOROETHENE(TRICHLOROETHYLENE)	41U	1,4-DICHLOROBENZENE
41U	1,2-DICHLOROPROPANE	41U	1,2-DICHLOROBENZENE
41U	DIBROMOMETHANE	22.0	PERCENT MOISTURE
41U	BROMODICHLOROMETHANE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 06/13/89

PROJECT NO. 89 400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-03 SUBSURFACE SOIL #03 COLLECTION START: 05/04/89 1225 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
110U	CHLOROMETHANE	110U	CIS 1,3-DICHLOROPROPENE
110U	VINYL CHLORIDE	1100U	METHYL ISOBUTYL KETONE
110U	BROMOMETHANE	110U	TOLUENE
110U	CHLOROETHANE	110U	TRANS-1,3 DICHLOROPROPENE
110U	TRICHLOROFLUOROMETHANE	110U	1,1,2-TRICHLOROETHANE
110U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	110U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
1100U	ACETONE	110U	1,3-DICHLOROPROPANE
1100U	CARBON DISULFIDE	1100U	METHYL BUTYL KETONE
110U	METHYLENE CHLORIDE	110U	DIBROMOCHLOROMETHANE
110U	TRANS-1,2-DICHLOROETHENE	110U	CHLOROBENZENE
110U	1,1-DICHLOROETHANE	110U	1,1,1,2-TETRACHLOROETHANE
1100U	VINYL ACETATE	110U	ETHYL BENZENE
110U	CIS-1,2-DICHLOROETHENE	110U	(M- AND/OR P-)XYLENE
110U	2,2-DICHLOROPROPANE	110U	O-XYLENE
1100U	METHYL ETHYL KETONE	110U	STYRENE
110U	BROMOCHLOROMETHANE	110U	BROMOFORM
110U	CHLOROFORM	110U	BROMOBENZENE
110U	1,1,1-TRICHLOROETHANE	110U	1,1,2,2-TETRACHLOROETHANE
110U	1,1 DICHLOROPROPENE	110U	1,2,3-TRICHLOROPROPANE
110U	CARBON TETRACHLORIDE	110U	O-CHLOROTOLUENE
110U	1,2-DICHLOROETHANE	110U	P-CHLOROTOLUENE
110U	BENZENE	110U	1,3-DICHLOROBENZENE
110U	TRICHLOROETHENE(TRICHLOROETHYLENE)	110U	1,4-DICHLOROBENZENE
110U	1,2-DICHLOROPROPANE	110U	1,2-DICHLOROBENZENE
110U	DIBROMOMETHANE	19.0	PERCENT MOISTURE
110U	BROMODICHLOROMETHANE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL COLLECTION START: 05/03/89 1550 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
1700U	BIS(2 CHLOROETHYL) ETHER
1700U	BIS(2-CHLOROISOPROPYL) ETHER
1700U	N-NITROSODI-N-PROPYLAMINE
1700U	HEXACHLOROETHANE
1700U	NITROBENZENE
1700U	ISOPHORONE
1700U	BIS(2-CHLOROETHOXY) METHANE
1700U	1,2,4-TRICHLOROBENZENE
1700U	NAPHTHALENE
1700U	4-CHLOROANILINE
1700U	HEXACHLOROBUTADIENE
1700U	2-METHYLNAPHTHALENE
1700U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1700U	2-CHLORONAPHTHALENE
1700U	2-NITROANILINE
1700U	DIMETHYL PHTHALATE
1700U	ACENAPHTHYLENE
1700U	2,6-DINITROTOLUENE
1700U	3-NITROANILINE
1700U	ACENAPHTHENE
1700U	DIBENZOFURAN
1700U	2,4-DINITROTOLUENE
1700U	DIETHYL PHTHALATE
1700U	FLUORENE
1700U	4-CHLOROPHENYL PHENYL ETHER
1700U	4-NITROANILINE
1700U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1700U	4-BROMOPHENYL PHENYL ETHER
1700U	HEXACHLOROBENZENE (HCB)
1700U	PHENANTHRENE
1700U	ANTHRACENE
1700U	DI-N-BUTYLPHTHALATE

UG/KG	ANALYTICAL RESULTS
1700U	FLUORANTHENE
1700U	PYRENE
1700U	BENZYL BUTYL PHTHALATE
1700U	3,3'-DICHLOROBENZIDINE
1700U	BENZO(A)ANTHRACENE
1700U	CHRYSENE
1700U	BIS(2-ETHYLHEXYL) PHTHALATE
1700U	DI-N-OCTYLPHTHALATE
1700U	BENZO(B AND/OR K)FLUORANTHENE
1700U	BENZO-A-PYRENE
1700U	INDENO (1,2,3-CD) PYRENE
1700U	DIBENZO(A,H)ANTHRACENE
1700U	BENZO(GHI)PERYLENE
1700U	PHENOL
1700U	2-CHLOROPHENOL
3300U	BENZYL ALCOHOL
1700U	2-METHYLPHENOL
1700U	(3-AND/OR 4-)METHYLPHENOL
1700U	2-NITROPHENOL
1700U	2,4-DIMETHYLPHENOL
3300U	BENZOIC ACID
1700U	2,4-DICHLOROPHENOL
1700U	4-CHLORO-3-METHYLPHENOL
1700U	2,4,6-TRICHLOROPHENOL
1700U	2,4,5-TRICHLOROPHENOL
3300U	2,4-DINITROPHENOL
3300U	4-NITROPHENOL
1700U	2,3,4,6-TETRACHLOROPHENOL
3300U	2-METHYL-4,6-DINITROPHENOL
3300U	PENTACHLOROPHENOL
21	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT CITY: ATHENS ST: GA **
** STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL COLLECTION START: 05/03/89 1550 STOP: 00/00/00 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

5000JN	HEXADECANOIC ACID
400JN	OCTADECANOIC ACID

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34899 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-02 SUBSURFACE SOIL #2

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1005 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
1700U	BIS(2 CHLOROETHYL) ETHER	1700U	FLUORANTHENE
1700U	BIS(2-CHLOROISOPROPYL) ETHER	1700U	PYRENE
1700U	N-NITROSODI-N-PROPYLAMINE	1700U	BENZYL BUTYL PHTHALATE
1700U	HEXACHLOROETHANE	1700U	3,3'-DICHLOROBENZIDINE
1700U	NITROBENZENE	1700U	BENZO(A)ANTHRACENE
1700U	ISOPHORONE	1700U	CHRYSENE
1700U	BIS(2-CHLOROETHOXY) METHANE	1700U	BIS(2-ETHYLHEXYL) PHTHALATE
1700U	1,2,4-TRICHLOROBENZENE	1700U	DI-N-OCTYLPHTHALATE
1700U	NAPHTHALENE	170J	BENZO(B AND/OR K)FLUORANTHENE
1700U	4-CHLOROANILINE	1700U	BENZO-A-PYRENE
1700U	HEXACHLOROBUTADIENE	1700U	INDENO (1,2,3-CD) PYRENE
1700U	2-METHYLNAPHTHALENE	1700U	DIBENZO(A,H)ANTHRACENE
1700U	HEXACHLOROCYCLOPENTADIENE (HCCP)	1700U	BENZO(GHI)PERYLENE
1700U	2-CHLORONAPHTHALENE	1700U	PHENOL
1700U	2-NITROANILINE	1700U	2-CHLOROPHENOL
1700U	DIMETHYL PHTHALATE	3400U	BENZYL ALCOHOL
1700U	ACENAPHTHYLENE	1700U	2-METHYLPHENOL
1700U	2,6-DINITROTOLUENE	1700U	(3-AND/OR 4-)METHYLPHENOL
1700U	3-NITROANILINE	1700U	2-NITROPHENOL
1700U	ACENAPHTHENE	1700U	2,4-DIMETHYLPHENOL
1700U	DIBENZOFURAN	3400U	BENZOIC ACID
1700U	2,4-DINITROTOLUENE	1700U	2,4-DICHLOROPHENOL
1700U	DIETHYL PHTHALATE	1700U	4-CHLORO-3-METHYLPHENOL
1700U	FLUORENE	1700U	2,4,6-TRICHLOROPHENOL
1700U	4-CHLOROPHENYL PHENYL ETHER	1700U	2,4,5-TRICHLOROPHENOL
1700U	4-NITROANILINE	3400U	2,4-DINITROPHENOL
1700U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE	3400U	4-NITROPHENOL
1700U	4-BROMOPHENYL PHENYL ETHER	1700U	2,3,4,6-TETRACHLOROPHENOL
1700U	HEXACHLOROBENZENE (HCB)	3400U	2-METHYL-4,6-DINITROPHENOL
1700U	PHENANTHRENE	3400U	PENTACHLOROPHENOL
1700U	ANTHRACENE	22	PERCENT MOISTURE
1700U	DI-N-BUTYLPHTHALATE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 06/08/89

PROJECT NO. 89-400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-03 SUBSURFACE SOIL #03 COLLECTION START: 05/04/89 1225 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
1700U	BIS(2 CHLOROETHYL) ETHER	1700U	FLUORANTHENE
1700U	BIS(2-CHLOROISOPROPYL) ETHER	1700U	PYRENE
1700U	N-NITROSODI-N-PROPYLAMINE	1700U	BENZYL BUTYL PHTHALATE
1700U	HEXACHLOROETHANE	1700U	3,3'-DICHLOROBENZIDINE
1700U	NITROBENZENE	1700U	BENZO(A)ANTHRACENE
1700U	ISOPHORONE	1700U	CHRYSENE
1700U	BIS(2-CHLOROETHOXY) METHANE	1700U	BIS(2-ETHYLHEXYL) PHTHALATE
1700U	1,2,4-TRICHLOROBENZENE	1700U	DI-N-OCTYLPHTHALATE
1700U	NAPHTHALENE	1700U	BENZO(B AND/OR K)FLUORANTHENE
1700U	4-CHLOROANILINE	1700U	BENZO-A-PYRENE
1700U	HEXACHLOROBUTADIENE	1700U	INDENO (1,2,3-CD) PYRENE
1700U	2-METHYLNAPHTHALENE	1700U	DIBENZO(A,H)ANTHRACENE
1700U	HEXACHLOROCYCLOPENTADIENE (HCCP)	1700U	BENZO(GHI)PERYLENE
1700U	2-CHLORONAPHTHALENE	1700U	PHENOL
1700U	2-NITROANILINE	1700U	2-CHLOROPHENOL
1700U	DIMETHYL PHTHALATE	3300U	BENZYL ALCOHOL
1700U	ACENAPHTHYLENE	1700U	2-METHYLPHENOL
1700U	2,6-DINITROTOLUENE	1700U	(3-AND/OR 4-)METHYLPHENOL
1700U	3-NITROANILINE	1700U	2-NITROPHENOL
1700U	ACENAPHTHENE	1700U	2,4-DIMETHYLPHENOL
1700U	DIBENZOFURAN	3300U	BENZOIC ACID
1700U	2,4-DINITROTOLUENE	1700U	2,4-DICHLOROPHENOL
1700U	DIETHYL PHTHALATE	1700U	4-CHLORO-3-METHYLPHENOL
1700U	FLUORENE	1700U	2,4,6-TRICHLOROPHENOL
1700U	4-CHLOROPHENYL PHENYL ETHER	1700U	2,4,5-TRICHLOROPHENOL
1700U	4-NITROANILINE	3300U	2,4-DINITROPHENOL
1700U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE	3300U	4-NITROPHENOL
1700U	4-BROMOPHENYL PHENYL ETHER	1700U	2,3,4,6-TETRACHLOROPHENOL
1700U	HEXACHLOROBENZENE (HCB)	3300U	2-METHYL-4,6-DINITROPHENOL
1700U	PHENANTHRENE	3300U	PENTACHLOROPHENOL
1700U	ANTHRACENE	19	PERCENT MOISTURE
1700U	DI-N-BUTYLPHTHALATE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-03 SUBSURFACE SOIL #03

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1225 STOP: 00/00/00

ANALYTICAL RESULTS UG/KG

200JN	TETRADECANOIC ACID
5000JN	HEXADECANOIC ACID
700JN	OCTADECANOIC ACID

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL COLLECTION START: 05/03/89 1550 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
8.1U	ALDRIN	62U	PCB-1232 (AROCLOR 1232)
27U	HEPTACHLOR	62U	PCB-1248 (AROCLOR 1248)
8.1U	HEPTACHLOR EPOXIDE	62U	PCB-1260 (AROCLOR 1260)
8.1U	ALPHA-BHC	62U	PCB-1016 (AROCLOR 1016)
8.1U	BETA-BHC	310U	TOXAPHENE
8.1U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
8.1U	DELTA-BHC	---	ALPHA-CHLORDENE /2
8.1U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
8.1U	DIELDRIN	---	GAMMA-CHLORDENE /2
8.1U	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
8.1U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
8.1U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
8.1U	ENDRIN	---	ALPHA-CHLORDANE /2
8.1U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
8.1U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
42U	CHLORDANE (TECH. MIXTURE) /1	19U	METHOXYCHLOR
62U	PCB-1242 (AROCLOR 1242)	8.1U	ENDRIN KETONE
62U	PCB-1254 (AROCLOR 1254)	21	PERCENT MOISTURE
62U	PCB-1221 (AROCLOR 1221)		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/14/89

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34899 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-02 SUBSURFACE SOIL #2

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1005 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
8.1U	ALDRIN	62U	PCB-1232 (AROCLOR 1232)
8.1U	HEPTACHLOR	62U	PCB-1248 (AROCLOR 1248)
8.1U	HEPTACHLOR EPOXIDE	62U	PCB-1260 (AROCLOR 1260)
8.1U	ALPHA-BHC	62U	PCB-1016 (AROCLOR 1016)
8.1U	BETA-BHC	310U	TOXAPHENE
8.1U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
8.1U	DELTA-BHC	---	ALPHA-CHLORDENE /2
8.1U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
8.1U	DIELDRIN	---	GAMMA-CHLORDENE /2
8.1J	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
8.1U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
8.1U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
8.1U	ENDRIN	---	ALPHA-CHLORDANE /2
8.1U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
8.1U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
42U	CHLORDANE (TECH. MIXTURE) /1	19U	METHOXYCHLOR
62U	PCB-1242 (AROCLOR 1242)	8.1U	ENDRIN KETONE
62U	PCB-1254 (AROCLOR 1254)	22	PERCENT MOISTURE
62U	PCB-1221 (AROCLOR 1221)		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

PROJECT NO. 89-400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL	PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT.	CITY: ATHENS ST: GA
STATION ID: SB-03 SUBSURFACE SOIL #03	COLLECTION START: 05/04/89 1225 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
8.1U	ALDRIN	62U	PCB-1232 (AROCLOR 1232)
8.1U	HEPTACHLOR	62U	PCB-1248 (AROCLOR 1248)
8.1U	HEPTACHLOR EPOXIDE	62U	PCB-1260 (AROCLOR 1260)
8.1U	ALPHA-BHC	62U	PCB-1016 (AROCLOR 1016)
8.1U	BETA-BHC	310U	TOXAPHENE
8.1U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
8.1U	DELTA-BHC	---	ALPHA-CHLORDENE /2
8.1U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
8.1U	DIELDRIN	---	GAMMA-CHLORDENE /2
8.1U	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
8.1U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
8.1U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
8.1U	ENDRIN	---	ALPHA-CHLORDANE /2
8.1U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
8.1U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
42U	CHLORDANE (TECH. MIXTURE) /1	19U	METHOXYCHLOR
62U	PCB-1242 (AROCLOR 1242)	8.1U	ENDRIN KETONE
62U	PCB-1254 (AROCLOR 1254)	19	PERCENT MOISTURE
62U	PCB-1221 (AROCLOR 1221)		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 06/13/89

PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SD-01 BACKGROUND SEDIMENT SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1630 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
44U	CHLOROMETHANE	44U	CIS 1,3-DICHLOROPROPENE
44U	VINYL CHLORIDE	440U	METHYL ISOBUTYL KETONE
44U	BROMOMETHANE	44U	TOLUENE
44U	CHLOROETHANE	44U	TRANS-1,3 DICHLOROPROPENE
44U	TRICHLOROFLUOROMETHANE	44U	1,1,2-TRICHLOROETHANE
44U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	44U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
440U	ACETONE	44U	1,3-DICHLOROPROPANE
440U	CARBON DISULFIDE	440U	METHYL BUTYL KETONE
44U	METHYLENE CHLORIDE	44U	DIBROMOCHLOROMETHANE
44U	TRANS-1,2-DICHLOROETHENE	44U	CHLOROBENZENE
44U	1,1-DICHLOROETHANE	44U	1,1,1,2-TETRACHLOROETHANE
440U	VINYL ACETATE	44U	ETHYL BENZENE
44U	CIS-1,2-DICHLOROETHENE	44U	(M- AND/OR P-)XYLENE
44U	2,2-DICHLOROPROPANE	44U	O-XYLENE
440U	METHYL ETHYL KETONE	44U	STYRENE
44U	BROMOCHLOROMETHANE	44U	BROMOFORM
44U	CHLOROFORM	44U	BROMOBENZENE
44U	1,1,1-TRICHLOROETHANE	44U	1,1,2,2-TETRACHLOROETHANE
44U	1,1 DICHLOROPROPENE	44U	1,2,3-TRICHLOROPROPANE
44U	CARBON TETRACHLORIDE	44U	O-CHLOROTOLUENE
44U	1,2-DICHLOROETHANE	44U	P-CHLOROTOLUENE
44U	BENZENE	44U	1,3-DICHLOROBENZENE
44U	TRICHLOROETHENE(TRICHLOROETHYLENE)	44U	1,4-DICHLOROBENZENE
44U	1,2-DICHLOROPROPANE	44U	1,2-DICHLOROBENZENE
44U	DIBROMOMETHANE	33.0	PERCENT MOISTURE
44U	BROMODICHLOROMETHANE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 06/13/89

PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SD-02 SEDIMENT SOIL #02 COLLECTION START: 05/03/89 1815 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
73U	CHLOROMETHANE	73U	CIS-1,3-DICHLOROPROPENE
73U	VINYL CHLORIDE	730U	METHYL ISOBUTYL KETONE
73U	BROMOMETHANE	73U	TOLUENE
73U	CHLOROETHANE	73U	TRANS-1,3-DICHLOROPROPENE
73U	TRICHLOROFLUOROMETHANE	73U	1,1,2-TRICHLOROETHANE
73U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	73U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
730U	ACETONE	73U	1,3-DICHLOROPROPANE
730U	CARBON DISULFIDE	730U	METHYL BUTYL KETONE
73U	METHYLENE CHLORIDE	73U	DIBROMOCHLOROMETHANE
73U	TRANS-1,2-DICHLOROETHENE	73U	CHLOROBENZENE
73U	1,1-DICHLOROETHANE	73U	1,1,1,2-TETRACHLOROETHANE
730U	VINYL ACETATE	73U	ETHYL BENZENE
73U	CIS-1,2-DICHLOROETHENE	73U	(M- AND/OR P-)XYLENE
73U	2,2-DICHLOROPROPANE	73U	O-XYLENE
730U	METHYL ETHYL KETONE	73U	STYRENE
73U	BROMOCHLOROMETHANE	73U	BROMOFORM
73U	CHLOROFORM	73U	BROMOBENZENE
73U	1,1,1-TRICHLOROETHANE	73U	1,1,2,2-TETRACHLOROETHANE
73U	1,1-DICHLOROPROPENE	73U	1,2,3-TRICHLOROPROPANE
73U	CARBON TETRACHLORIDE	73U	O-CHLOROTOLUENE
73U	1,2-DICHLOROETHANE	73U	P-CHLOROTOLUENE
73U	BENZENE	73U	1,3-DICHLOROBENZENE
73U	TRICHLOROETHENE(TRICHLOROETHYLENE)	73U	1,4-DICHLOROBENZENE
73U	1,2-DICHLOROPROPANE	73U	1,2-DICHLOROBENZENE
73U	DIBROMOMETHANE	48.0	PERCENT MOISTURE
73U	BROMODICHLOROMETHANE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 06/08/89

PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SD-01 BACKGROUND SEDIMENT SOIL COLLECTION START: 05/03/89 1630 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
2000UJ	BIS(2 CHLOROETHYL) ETHER	2000UJ	FLUORANTHENE
2000UJ	BIS(2-CHLOROISOPROPYL) ETHER	2000UJ	PYRENE
2000UJ	N-NITROSODI-N-PROPYLAMINE	2000UJ	BENZYL BUTYL PHTHALATE
2000UJ	HEXACHLOROETHANE	2000UJ	3,3'-DICHLOROBENZIDINE
2000UJ	NITROBENZENE	2000UJ	BENZO(A)ANTHRACENE
2000UJ	ISOPHORONE	2000UJ	CHRYSENE
2000UJ	BIS(2-CHLOROETHOXY) METHANE	2000UJ	BIS(2-ETHYLHEXYL) PHTHALATE
2000UJ	1,2,4-TRICHLOROBENZENE	2000UJ	DI-N-OCTYLPHTHALATE
2000UJ	NAPHTHALENE	2000UJ	BENZO(B AND/OR K)FLUORANTHENE
2000UJ	4-CHLOROANILINE	2000UJ	BENZO-A-PYRENE
2000UJ	HEXACHLOROBUTADIENE	2000UJ	INDENO (1,2,3-CD) PYRENE
2000UJ	2-METHYLNAPHTHALENE	2000UJ	DIBENZO(A,H)ANTHRACENE
2000UJ	HEXACHLOROCYCLOPENTADIENE (HCCP)	2000UJ	BENZO(GHI)PERYLENE
2000UJ	2-CHLORONAPHTHALENE	2000UJ	PHENOL
2000UJ	2-NITROANILINE	2000UJ	2-CHLOROPHENOL
2000UJ	DIMETHYL PHTHALATE	4000UJ	BENZYL ALCOHOL
2000UJ	ACENAPHTHYLENE	2000UJ	2-METHYLPHENOL
2000UJ	2,6-DINITROTOLUENE	2000UJ	(3-AND/OR 4-)METHYLPHENOL
2000UJ	3-NITROANILINE	2000UJ	2-NITROPHENOL
2000UJ	ACENAPHTHENE	2000UJ	2,4-DIMETHYLPHENOL
2000UJ	DIBENZOFURAN	4000UJ	BENZOIC ACID
2000UJ	2,4-DINITROTOLUENE	2000UJ	2,4-DICHLOROPHENOL
2000UJ	DIETHYL PHTHALATE	2000UJ	4-CHLORO-3-METHYLPHENOL
2000UJ	FLUORENE	2000UJ	2,4,6-TRICHLOROPHENOL
2000UJ	4-CHLOROPHENYL PHENYL ETHER	2000UJ	2,4,5-TRICHLOROPHENOL
2000UJ	4-NITROANILINE	4000UJ	2,4-DINITROPHENOL
2000UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE	4000UJ	4-NITROPHENOL
2000UJ	4-BROMOPHENYL PHENYL ETHER	2000UJ	2,3,4,6-TETRACHLOROPHENOL
2000UJ	HEXACHLOROBENZENE (HCB)	4000UJ	2-METHYL-4,6-DINITROPHENOL
2000UJ	PHENANTHRENE	4000UJ	PENTACHLOROPHENOL
2000UJ	ANTHRACENE	33	PERCENT MOISTURE
2000UJ	DI-N-BUTYLPHTHALATE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.
06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 89-400   SAMPLE NO. 34906  SAMPLE TYPE: SOIL      PROG ELEM: NSF   COLLECTED BY: R YOUNG                  **
**   SOURCE: WESTINGHOUSE ELECT                                   CITY: ATHENS               ST: GA                       **
**   STATION ID: SD-01 BACKGROUND SEDIMENT SOIL                   COLLECTION START: 05/03/89  1630   STOP: 00/00/00       **
**                                                                                                                        **
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ANALYTICAL RESULTS UG/KG

2000JN HEXADECANOIC ACID

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SD-02 SEDIMENT SOIL #02 COLLECTION START: 05/03/89 1815 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
2500U	BIS(2-CHLOROETHYL) ETHER	2500U	FLUORANTHENE
2500U	BIS(2-CHLOROISOPROPYL) ETHER	2500U	PYRENE
2500U	N-NITROSODI-N-PROPYLAMINE	2500U	BENZYL BUTYL PHTHALATE
2500U	HEXACHLOROETHANE	2500U	3,3'-DICHLOROBENZIDINE
2500U	NITROBENZENE	2500U	BENZO(A)ANTHRACENE
2500U	ISOPHORONE	2500U	CHRYSENE
2500U	BIS(2-CHLOROETHOXY) METHANE	2500U	BIS(2-ETHYLHEXYL) PHTHALATE
2500U	1,2,4-TRICHLOROBENZENE	2500U	DI-N-OCTYLPHTHALATE
2500U	NAPHTHALENE	2500U	BENZO(B AND/OR K)FLUORANTHENE
2500U	4-CHLOROANILINE	2500U	BENZO-A-PYRENE
2500U	HEXACHLOROBUTADIENE	2500U	INDENO (1,2,3-CD) PYRENE
2500U	2-METHYLNAPHTHALENE	2500U	DIBENZO(A,H)ANTHRACENE
2500U	HEXACHLOROCYCLOPENTADIENE (HCCP)	2500U	BENZO(GHI)PERYLENE
2500U	2-CHLORONAPHTHALENE	2500U	PHENOL
2500U	2-NITROANILINE	2500U	2-CHLOROPHENOL
2500U	DIMETHYL PHTHALATE	5000U	BENZYL ALCOHOL
2500U	ACENAPHTHYLENE	2500U	2-METHYLPHENOL
2500U	2,6-DINITROTOLUENE	2500U	(3-AND/OR 4-)METHYLPHENOL
2500U	3-NITROANILINE	2500U	2-NITROPHENOL
2500U	ACENAPHTHENE	2500U	2,4-DIMETHYLPHENOL
2500U	DIBENZOFURAN	5000U	BENZOIC ACID
2500U	2,4-DINITROTOLUENE	2500U	2,4-DICHLOROPHENOL
2500U	DIETHYL PHTHALATE	2500U	4-CHLORO-3-METHYLPHENOL
2500U	FLUORENE	2500U	2,4,6-TRICHLOROPHENOL
2500U	4-CHLOROPHENYL PHENYL ETHER	2500U	2,4,5-TRICHLOROPHENOL
2500U	4-NITROANILINE	5000U	2,4-DINITROPHENOL
2500U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE	5000U	4-NITROPHENOL
2500U	4-BROMOPHENYL PHENYL ETHER	2500U	2,3,4,6-TETRACHLOROPHENOL
2500U	HEXACHLOROBENZENE (HCB)	5000U	2-METHYL-4,6-DINITROPHENOL
2500U	PHENANTHRENE	5000U	PENTACHLOROPHENOL
2500U	ANTHRACENE	48	PERCENT MOISTURE
2500U	DI-N-BUTYLPHTHALATE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT CITY: ATHENS ST: GA **
** STATION ID: SD-02 SEDIMENT SOIL #02 COLLECTION START: 05/03/89 1815 STOP: 00/00/00 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

6000JN	HEXADECANOIC ACID
700JN	OCTADECANOIC ACID
N	PETROLEUM PRODUCT

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SD-01 BACKGROUND SEDIMENT SOIL COLLECTION START: 05/03/89 1630 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
9.5U	ALDRIN	73U	PCB-1232 (AROCLOR 1232)
9.5U	HEPTACHLOR	73U	PCB-1248 (AROCLOR 1248)
9.5U	HEPTACHLOR EPOXIDE	73U	PCB-1260 (AROCLOR 1260)
9.5U	ALPHA-BHC	73U	PCB-1016 (AROCLOR 1016)
9.5U	BETA-BHC	360U	TOXAPHENE
9.5U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
9.5U	DELTA-BHC	---	ALPHA-CHLORDENE /2
9.5U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
9.5U	DIELDRIN	---	GAMMA-CHLORDENE /2
9.5U	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
9.5U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
9.5U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
9.5U	ENDRIN	---	ALPHA-CHLORDANE /2
9.5U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
9.5U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
49U	CHLORDANE (TECH. MIXTURE) /1	22U	METHOXYCHLOR
73U	PCB-1242 (AROCLOR 1242)	9.5U	ENDRIN KETONE
73U	PCB-1254 (AROCLOR 1254)	33	PERCENT MOISTURE
73U	PCB-1221 (AROCLOR 1221)		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SD-02 SEDIMENT SOIL #02 COLLECTION START: 05/03/89 1815 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
12U	ALDRIN	90U	PCB-1232 (AROCLOR 1232)
12U	HEPTACHLOR	90U	PCB-1248 (AROCLOR 1248)
12U	HEPTACHLOR EPOXIDE	90U	PCB-1260 (AROCLOR 1260)
12U	ALPHA-BHC	90U	PCB-1016 (AROCLOR 1016)
12U	BETA-BHC	450U	TOXAPHENE
12U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
12U	DELTA-BHC	---	ALPHA-CHLORDENE /2
12U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
12U	DIELDRIN	---	GAMMA-CHLORDENE /2
12U	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
12U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
12U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
12U	ENDRIN	---	ALPHA-CHLORDANE /2
12U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
12U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
61U	CHLORDANE (TECH. MIXTURE) /1	28U	METHOXYCHLOR
90U	PCB-1242 (AROCLOR 1242)	12U	ENDRIN KETONE
90U	PCB-1254 (AROCLOR 1254)	48	PERCENT MOISTURE
90U	PCB-1221 (AROCLOR 1221)		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

APPENDIX C

Site Inspection Report

EPA

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D003295144

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Westinghouse Electric Corporation	Newton Bridge Road

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Athens	GA		Clarke		

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
33 58 21.0	083 23 44.0	☒ A. PRIVATE ☐ B. FEDERAL ____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION (MONTH DAY YEAR)	02 SITE STATUS	03 YEARS OF OPERATION
05 03 89	☒ ACTIVE ☐ INACTIVE	1957 (BEGINNING YEAR) / Present (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☒ B. EPA CONTRACTOR NUS Corporation (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ____ (Name of firm)
☐ E. STATE ☐ F. STATE CONTRACTOR ____ (Name of firm) ☐ G. OTHER ____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Rebecca A. Hoffmann	Environmental Scientist	NUS Corporation	(404) 938-7710

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Phillp Henderson	Geologist	NUS Corporation	(404) 938-7710
Ron Young	Sampler	NUS Corporation	(404) 938-7710
Ron Wilde	Sampler	NUS Corporation	(404) 938-7710
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO.
Frank James	Environmental Control Officer	Westinghouse Electic Corp. Newton Bridge Rd. Athens GA.	(404) 548-3121
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	0820	≈ 69°F, clear and sunny

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Mario Villamarzo	U.S.E.P.A	(404) 347-5065

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE (MONTH DAY YEAR)
Rebecca A. Hoffmann	U.S.E.P.A	NUS Corporation	404-938-7710	05/30/90

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D003295144

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- A. SOLID
- B. POWDER, FINES
- X C. SLUDGE
- D. OTHER ______ (Specify)
- E. SLURRY
- X F. LIQUID
- G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

- TONS ______
- CUBIC YARDS unk
- NO. OF DRUMS unk

03 WASTE CHARACTERISTICS (Check all that apply)

- X A. TOXIC
- X B. CORROSIVE
- C. RADIOACTIVE
- D. PERSISTENT
- E. SOLUBLE
- F. INFECTIOUS
- G. FLAMMABLE
- H. IGNITABLE
- X I. HIGHLY VOLATILE
- J. EXPLOSIVE
- K. REACTIVE
- L. INCOMPATIBLE
- M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	unk		
OLW	OILY WASTE	unk		
SOL	SOLVENTS	unk		
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS	unk		
BAS	BASES	unk		
MES	HEAVY METALS	unk		

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	Phosphoric acid	7664-38-2	5, 55 gal. drums	unk	
	hydrochloric acid	7647-01-0	5, 55 gal. drums	unk	
	methyl ethyl ketone	NONE	5, 55 gal. drums	unk	
	Kerosene	NONE	5, 55 gal. drums	unk	
	xylene	1330-20-7	5, 55 gal. drums		

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA and state file material

EPA	POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS	I. IDENTIFICATION 01 STATE: GA 02 SITE NUMBER: D0003295144

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 [ ] OBSERVED (DATE: ______) [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ______ 04 NARRATIVE DESCRIPTION

There is not a liner present at the landfill

01 [X] B. SURFACE WATER CONTAMINATION — 02 [X] OBSERVED (DATE: 05/03/89) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ______ 04 NARRATIVE DESCRIPTION

Sediment samples collected along possible surface water migration pathway revealed the presence of inorganic contamination

01 [X] C. CONTAMINATION OF AIR — 02 [ ] OBSERVED (DATE: ______) [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ______ 04 NARRATIVE DESCRIPTION

Contaminated soils on the surface of the landfill are uncontained

01 [ ] D. FIRE EXPLOSIVE CONDITIONS — 02 [ ] OBSERVED (DATE: ______) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ______ 04 NARRATIVE DESCRIPTION

01 [X] E. DIRECT CONTACT — 02 [ ] OBSERVED (DATE: ______) [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ______ 04 NARRATIVE DESCRIPTION

There are no fences or barriers to entry in place around the landfill.

01 [X] F. CONTAMINATION OF SOIL — 02 [X] OBSERVED (DATE: 05/03/89) [ ] POTENTIAL [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED: <1 (Acres) 04 NARRATIVE DESCRIPTION

01 [ ] G. DRINKING WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: ______) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ______ 04 NARRATIVE DESCRIPTION

01 [ ] H. WORKER EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: ______) [ ] POTENTIAL [ ] ALLEGED
03 WORKERS POTENTIALLY AFFECTED: ______ 04 NARRATIVE DESCRIPTION

01 [X] I. POPULATION EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: ______) [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ______ 04 NARRATIVE DESCRIPTION

There is a population of approximately 49,884 within the 4-mile site radius.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GA	D003295144

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: ______) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Contamination of surface soils has been documented at the landfill.

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: ______) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: ______) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES (Spills, Runoff, Standing liquids, Leaking drums) — 02 ☐ OBSERVED (DATE: ______) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ______ 04 NARRATIVE DESCRIPTION

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: ______) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: ______) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: ______) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 49,884 (air pathway)

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA, state file material

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D003295144

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☒ J. NONE				landfill used 1957 - 1970

III. SITE DESCRIPTION

01 STORAGE DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☒ F. LANDFILL	unk.	
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)
- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER
- ☐ A. BUILDINGS ON SITE

06 AREA OF SITE
<1 Acres

07 COMMENTS

Westinghouse disposed of manufacturing wastes in a landfill from 1957 to 1970. The landfill is located approximately 900 feet northeast of the active portion of Westinghouse.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☒ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

The landfill has been covered with soil and is heavily vegetated. There are several rusty drums located on the surface of the landfill but not a significant number.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☒ YES ☐ NO

02 COMMENTS

See Direct contact under hazardous conditions and incidents

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

EPA and state file material

EPA

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: GA 02 SITE NUMBER: D003295144

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A ☒	B ☐
NON-COMMUNITY	C ☐	D ☒

02 STATUS

	ENDANGERED	AFFECTED	MONITORED
	A. ☐	B. ☐	C. ☒
	D. ☐	E. ☐	F. ☐

03 DISTANCE TO SITE
A 2.5 (mi)
B 1 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING
☒ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)
☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available)
☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 11.4

03 DISTANCE TO NEAREST DRINKING WATER WELL 1 (mi)

04 DEPTH TO GROUNDWATER: varies w/topography

05 DIRECTION OF GROUNDWATER FLOW: varies

06 DEPTH TO AQUIFER OF CONCERN: 246 (ft)

07 POTENTIAL YIELD OF AQUIFER: 37440 (gpd)

08 SOLE SOURCE AQUIFER: ☒ YES ☐ NO

09 DESCRIPTION OF WELLS (including useage, depth, and location relative to population and buildings)
There are 3 known private wells within the 4-mile site radius

10 RECHARGE AREA
☒ YES ☐ NO
COMMENTS: recharge occurs in topographic highs

11 DISCHARGE AREA
☒ YES ☐ NO
COMMENTS: Discharge occurs in topographic lows

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR, RECREATION DRINKING WATER SOURCE
☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES
☐ C. COMMERCIAL, INDUSTRIAL
☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME	AFFECTED	DISTANCE TO SITE
None - there are no routes for surface water	☐	(mi)
migration from the site	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 486 (NO. OF PERSONS)	B. 18,718 (NO. OF PERSONS)	C. 18,265 (NO. OF PERSONS)

02 DISTANCE TO NEAREST POPULATION 0.5 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE ______

04 DISTANCE TO NEAREST OFF-SITE BUILDING 0.3 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

Within a 4-mile site radius, the area is comprised, in descending percentage, of rural/undeveloped, residential, commercial, and industrial property.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D003295144

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ☒ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☒ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK: varies (ft)
04 DEPTH OF CONTAMINATED SOIL ZONE: < 1 (ft)
05 SOIL pH: unk

06 NET PRECIPITATION: 2 (in)
07 ONE YEAR 24 HOUR RAINFALL: ______ (in)
08 SLOPE — SITE SLOPE: 2 % — DIRECTION OF SITE SLOPE: east — TERRAIN AVERAGE SLOPE: 3-4 %

09 FLOOD POTENTIAL: SITE IS IN ______ YEAR FLOODPLAIN
10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)
ESTUARINE A. ______ (mi) OTHER B. ______ (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species) ______ (mi)
ENDANGERED SPECIES: ______

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS, NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS — PRIME AG LAND	AGRICULTURAL LANDS — AG LAND
A. 0.3 (mi)	B. 0.7 (mi)	C. unk (mi)	D. unk (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The landfill is located on a ridge approximately 900 feet from the WEC facility. The land slopes down gradually towards the east. The area is heavily vegetated with large tree and underbrush.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA and state file material

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D003295144

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	7	Region IV Environmental Protection Agency analytical service laboratory, Athens, GA	6/19/89
VEGETATION			
OTHER sediment	2	same as above	6/19/89

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☐ AERIAL

02 IN CUSTODY OF NUS Corporation
(Name of organization or individual)

03 MAPS
☒ YES
☐ NO

04 LOCATION OF MAPS
NUS Corporation, Region IV

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

A geophysical survey was conducted to delineate areas where hazardous waste was alleged to have been buried, and to provide sampling team with information that would aide in the selection of sampling locations. Significant magnetic anomalies were detected within the area that was surveyed. Two locations within this area were targeted for sampling.

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA, State, and NUS Corporation file material

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GA	D003295144

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER		
Westinghouse Electric Corporation			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		
Newton Bridge Rd.			
05 CITY	06 STATE	07 ZIP CODE	
Athens	GA	30613	
01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		
05 CITY	06 STATE	07 ZIP CODE	
01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		
05 CITY	06 STATE	07 ZIP CODE	
01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		
05 CITY	06 STATE	07 ZIP CODE	

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER		
Westinghouse Electric Corporation			
10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE		
11 Stanwix Street			
12 CITY	13 STATE	14 ZIP CODE	
Pittsburg	PA	15222	
08 NAME	09 D+B NUMBER		
10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE		
12 CITY	13 STATE	14 ZIP CODE	
08 NAME	09 D+B NUMBER		
10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE		
12 CITY	13 STATE	14 ZIP CODE	
08 NAME	09 D+B NUMBER		
10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE		
12 CITY	13 STATE	14 ZIP CODE	

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE

IV. REALTY OWNER(S) (If applicable, list most recent first)

01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA and state file material

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D003295144

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA and state file material

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GA	D003295144

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Westinghouse Electric Corporation	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
Newton Bridge Road	

05 CITY	06 STATE	07 ZIP CODE
Athens	GA	30613

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	05 CITY / 06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	05 CITY / 06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	05 CITY / 06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	05 CITY / 06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA and state file material

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GA	D003295144

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED 04 DESCRIPTION NONE	02 DATE	03 AGENCY
01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ C. PERMANENT WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ D. SPILLED MATERIAL REMOVED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ E. CONTAMINATED SOIL REMOVED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ F. WASTE REPACKAGED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ G. WASTE DISPOSED ELSEWHERE 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ H. ON SITE BURIAL 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ I. IN SITU CHEMICAL TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ J. IN SITU BIOLOGICAL TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ K. IN SITU PHYSICAL TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ L. ENCAPSULATION 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ M. EMERGENCY WASTE TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ N. CUTOFF WALLS 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ P. CUTOFF TRENCHES/SUMP 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ Q. SUBSURFACE CUTOFF WALL 04 DESCRIPTION	02 DATE	03 AGENCY

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GA	D003295144

II PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ S. CAPPING/COVERING — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GA	D003295144

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY ENFORCEMENT ACTION

NONE

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

APPENDIX D

Background
1029

page __ of __

MAG FIELD DATA SHEET

10 ft spacing Downhill

STATION X	STATION Y	Reading	Reading	Reading	Average (gammas)	Comments
0	0	52588				
0	1	52599				
0	2	52602				
0	3	52599				
0	4	52612				
0	5	52630				
0	6	52642				
0	7	52657				
0	8	52676				

* Field data sheet is an extension of Geophysical Logbook F7-1377.

Location Westinghouse Albany GA Ave 52622

File name West

Station 0,0
SW corner

MAG FIELD DATA SHEET

STATION		Reading	Reading	Reading	Average (gammas)	Comments
X	Y					
0	0	52690				
0	1	52453				
0	2	52569				
0	3	52765				
0	4	52540				
0	5	52727				
0	6	53146				
0	7	52736				
0	8	52447				
0	9	52575				
0	10	53123				
0	11	52195				
0	12	52396				
1	0	52625				
1	1	52716				
	2	52616				
	3	52614				
	4	52772				
	5	52899				
	6	53277				
	7	*53427				
	8	52249				
	9	51793				
	10					
	11					

12

* Field data sheet is an extension of Geophysical Logbook ______________.

Location ______________________________

MAG FIELD DATA SHEET

STATION X	STATION Y	Reading	Reading	Reading	Average (gammas)	Comments
SW corner 2	0	52602				
	1	52641				
	2	52679				
	3	52751				
	4	52848				
	5	52532				
	6	52483				
	7	52407				
	8	52348				
	9	52486				
	10	52516				
SW corner 3	0	52642				
	1	52613				
	2	52556				
	3	52641				
	4	*52744				
	5	52486				
	6	52591				
	7	52488				
	8	52502				
✓	9	52538				
4	0	52572				
	1	52545				
	2	52623				
	3	52771				

* Field data sheet is an extension of Geophysical Logbook ________________.

Location ________________________________

page __ of __

MAG FIELD DATA SHEET

STATION X	STATION Y	Reading	Reading	Reading	Average (gammas)	Comments
4	4	52866				
	5	52535				
	6	52420				
	7	52523				
	8	52527				
	9	52556				
SW corner -1	0					
	1					
	2					
	3					
	4	52544				
	5	52450				
	6	52279				
	7	53242				
	8	53420				
	9	53200				
	10	52737				
	11	52848				
	12	53438				

* Field data sheet is an extension of Geophysical Logbook ______________.

Location ______________________________

DOCUMENTATION RECORDS
FOR
HAZARD RANKING SYSTEM

INSTRUCTIONS: As briefly as possible summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference. Include the location of the document.

FACILITY NAME: Westclock, Inc

LOCATION: 100 Newton Bridge Road, Athens, GA 30613

DATE SCORED: June 30, 1988

PERSON SCORING: Elizabeth G. Topp

PRIMARY SOURCE(S) OF INFORMATION (e.g., EPA region, state, FIT, etc.):

Georgia EPD state file: Westclox Inc. (GAD057297400)

FACTORS NOT SCORED DUE TO INSUFFICIENT INFORMATION:

Air Route

Fire and Explosion

COMMENTS OR QUALIFICATIONS:

GROUND WATER ROUTE

1. **OBSERVED RELEASE**

Contaminants detected (5 maximum):

N/A

Rationale for attributing the contaminants to the facility:

2. **ROUTE CHARACTERISTICS**

Depth to Aquifer of Concern

Name/description of aquifer(s) of concern:

The site is located in the Piedmont Physiographic Province, Crystalline Rock Aquifers contain groundwater in this area. Depth to groundwater varies with precipitation. In the unconsolidated materials overlying fractured rocks, groundwater could be located as shallow as 50 feet or as deep as 70 feet. Groundwater in fractures may occur as deep as 450-500 feet. (Ref. 10)

Depth(s) from the ground surface to the highest seasonal level of the saturated zone [water table(s)] of the aquifer of concern:

Groundwater could be as shallow as 50 feet.

(Ref. 9)

Depth from the ground surface to the lowest point of waste disposal/storage:

There is no waste disposal on-site.

(Ref. 1)

C-9

Net Precipitation

Mean Annual or seasonal precipitation (list months for seasonal):

48 inches per year

(Ref. 9)

Mean annual lake or seasonal evaporation (list months for seasonal):

40 inches per year

(Ref. 12)

Net precipitation (subtract the above figures):

8 inches per year

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Soils consist of sandy loams and clayey loams of the Appling and Davidson series of the Cecil Association.

(Ref. 9)

Permeability associated with soil type:

All soils in the area are "moderately permeable."

Approximate rate of hydraulic conductivity = 10^{-3} - 10^{-5} cm/sec

(Ref. 9,12)

Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

All substances of concern are liquids or sludges.

(Ref. 1)

3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

There is no on-site disposal or surface impoundments. Storage areas for trychloroethylene and waste drums have no containment walls. (Ref. 1)

Method with highest score:

The trichloroethylene storage tanks are on an unlined earthen surface with no containment walls. (Ref. 1)

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

Electroplating sludge - (high in nickel)
Trichloroethylene sludge
Paint thinner sludge (Ref. 1)
Naptha mixed with machine oil

Compound with highest score:

Trichloroethylene sludge

(Ref. 12)

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

Approximately 99 drums of waste materials are produced each quarter.

(Ref. 1)

Basis of estimating and/or computing waste quantity:

Waste quantities are according to Mr. Bob Mills, Loss Control Administrator.

(Ref. 1)

5. TARGETS

Ground Water Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

There are 92 households (350 people) using groundwater within three miles of the facility. City water (surface water from N. Oconee River) is available to all 92 of these households. (Ref. 1)

Distance to the Nearest Well

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

Nearest well is approximately one mile northwest of the facility. The road is not named on the map, but it runs east-west between Newton Bridge Road and U.S. Route 441. (Ref. 1)

Distance to above well or building:

one mile

Population Served by Ground Water Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

There are no municipal wells within 3 miles of the facility.

(Ref. 1)

Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre):

There is no irrigation with groundwater within 3 miles of the facility.

(Ref. 8)

Total population served by ground water within a 3-mile radius:

350. (Ref. 1, 5)

SURFACE WATER ROUTE

1. OBSERVED RELEASE

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

No surface water or sediment samples were taken.

(Ref. 5)

Rationale for attributing the contaminants to the facility:

NA

2. ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent: 2%

(Ref. 6, 7)

Name/description of nearest downslope surface water:

An unnamed tributary to the North Oconee River runs east-west about 1500' south of the facility.

(Ref. 6)

Average slope of terrain between facility and above-cited surface water body in percent: 2%

(Ref. 6, 7)

Is the facility located either totally or partially in surface water?

no

(Ref. 6)

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Is the facility completely surrounded by areas of higher elevation?

No - elevations are slightly higher to the north, west, and south.

(Ref. 6)

1-Year 24-Hour Rainfall in Inches

3 inches.

(Ref. 9)

Distance to Nearest Downslope Surface Water

1500 feet.

(Ref. 6)

Physical State of Waste

All wastes are liquid or sludge

(Ref. 1)

6. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated: (same as groundwater)

There is no on-site disposal or surface impoundments, Storage areas for trichloroethylene and waste drums have no containment walls.

(Ref. 1)

Method with highest score:

The trichloroethylene storage tanks are on an unlined earthen surface with no containment walls.

(Ref. 12)

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

Electroplating sludge - (high in nickel)
Trichloroethylene sludge
Paint thinner sludge
Naptha mixed with machine oil (Ref. 1)

Compound with highest score:

Trichloroethylene sludge

(Ref. 12)

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give reasonable estimate even if quantity is above maximum):

Approximately 99 drums of waste materials are produced each quarter.

(Ref. 1)

Basis of estimating and/or computing waste quantity:

Waste quantities are according to Mr. Bob Mills, Loss Control Administrator.

(Ref. 1)

5. TARGETS

Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:

Drinking water is supplied to Clarke, Oconee, and Madison Counties from the North and Middle Oconee Rivers. The Athens Water Works has an intake on the North Oconee located about 3/4 miles from the facility and slightly downstream from it. There is no known use of the North or Middle Oconee Rivers for irrigation. There are no restrictions concerning fishing or recreational use of the North or Middle Oconee Rivers.

(Ref 1, 8)

Is there tidal influence?

No

(Ref. 6)

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

There are no coastal wetlands in the study area.

(Ref. 6)

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

There are no fresh-water wetlands in the study area.

(Ref. 6)

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:

There are no critical habitats of endangered species or national wildlife refuge in the study area.

(Ref. 13)

Population Served by Surface Water

Location(s) of water-supply intake(s) within 3 miles (free-flowing bodies) or 1 mile (static water bodies) downstream of the hazardous substance and population served by each intake:

The City of Athens has a water-supply intake on the North Oconee River about 3/4 mi. east and slightly downstream of the facility.

(Ref. 8)

Computation of land area irrigated by above-cited intake(s) and conversion to population (1.5 people per acre):

There is no known use of surface water for irrigation in the study area.

(Ref. 8)

Total population served:

0

(Ref. 8)

Name/description of nearest of above water bodies: N/A

Distance to above-cited intakes, measured in stream miles: N/A

AIR ROUTE – Not Scored

1. OBSERVED RELEASE

Contaminants detected:

Date and location of detection of contaminants:

Methods used to detect the contaminants:

Rationale for attributing the contaminants to the site:

2. WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

Most incompatible pair of compounds:

Toxicity

Most toxic compound:

Hazardous Waste Quantity

Total quantity of hazardous waste:

Basis of estimating and/or computing waste quantity:

3. TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi.   0 to 1 mi.   0 to ½ mi.   0 to ¼ mi.

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

Distance to critical habitat of an endangered species, if 1 mile or less:

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Distance to residential area, if 2 miles or less:

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

FIRE AND EXPLOSION - Not Scored

1. CONTAINMENT

Hazardous substances present:

Type of containment, if applicable:

2. WASTE CHARACTERISTICS

Direct Evidence

Type of instrument and measurements:

Ignitability

Compound used:

Reactivity

Most reactive compound:

Incompatibility

Most incompatible pair of compounds:

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility:

Basis of estimating and/or computing waste quantity:

3. **TARGETS**

Distance to Nearest Population

Distance to Nearest Building

Distance to Sensitive Environment

Distance to wetlands:

Distance to critical habitat:

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Distance to residential area, if 2 miles or less:

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

<u>Population Within 2-Mile Radius</u>

<u>Buildings Within 2-Mile Radius</u>

DIRECT CONTACT

1. OBSERVED INCIDENT

Date, location, and pertinent details of incident:

There is no known "incident" except for the fuel oil spill in 1985. This spill was cleaned up and the contaminated soils were removed from the site.

2. ACCESSIBILITY

Describe type of barrier(s):

The facility is fenced, and a guard is on duty 24 hrs/day.

(Ref. 1)

3. CONTAINMENT

Type of containment, if applicable:

Waste drums are stored in an area with no containment walls. Trichloroethylene is stored in an outside above-ground storage tank with no containment walls and no protection of the ground surface. (Ref. 1)

4. WASTE CHARACTERISITCS

Toxicity

Compounds evaluated:
Electroplating sludge
Trichloroethylene sludge (Ref. 1)
Paint thinner sludge
Naptha mixed with machine oil

Compound with highest score:

Trichloroethylene

(Ref. 12)

5. **TARGETS**

Population within one-mile radius

approximately 5276

(Ref. 1)

Distance to critical habitat (of endangered species)

There are no critical habitats within the study area.

(Ref. 13)

C-35

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV
COLLEGE STATION RD.
ATHENS, GA. 30613

*****MEMORANDUM******

DATE: 06/14/89

SUBJECT: Results of Purgeable Organic Analysis;
89-400 WESTINGHOUSE ELECT.
ATHENS GA

FROM: Tom B. Bennett, jr.
Chief, Organic Chemistry Section

TO: PHIL BLACKWELL

Attached are the results of analysis of samples collected as part of the subject project.

If you have any questions please contact me.

ATTACHMENT

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/13/89

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-04 SURFACE SOIL #04

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1120 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
930000U	CHLOROMETHANE	930000U	CIS-1,3-DICHLOROPROPENE
930000U	VINYL CHLORIDE	9.3E6U	METHYL ISOBUTYL KETONE
930000U	BROMOMETHANE	930000U	TOLUENE
930000U	CHLOROETHANE	930000U	TRANS-1,3 DICHLOROPROPENE
930000U	TRICHLOROFLUOROMETHANE	930000U	1,1,2-TRICHLOROETHANE
930000U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	930000U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
9.3E6U	ACETONE	930000U	1,3-DICHLOROPROPANE
9.3E6U	CARBON DISULFIDE	9.3E6U	METHYL BUTYL KETONE
930000U	METHYLENE CHLORIDE	930000U	DIBROMOCHLOROMETHANE
930000U	TRANS-1,2-DICHLOROETHENE	930000U	CHLOROBENZENE
930000U	1,1-DICHLOROETHANE	1.9E6U	1,1,1,2-TETRACHLOROETHANE
9.3E6U	VINYL ACETATE	1.1E6	ETHYL BENZENE
930000U	CIS-1,2-DICHLOROETHENE	1.7E7	(M- AND/OR P-)XYLENE
930000U	2,2-DICHLOROPROPANE	5.4E6	O-XYLENE
9.3E6U	METHYL ETHYL KETONE	1.9E6U	STYRENE
930000U	BROMOCHLOROMETHANE	930000U	BROMOFORM
930000U	CHLOROFORM	1.9E6U	BROMOBENZENE
930000U	1,1,1-TRICHLOROETHANE	930000U	1,1,2,2-TETRACHLOROETHANE
930000U	1,1-DICHLOROPROPENE	1.9E6U	1,2,3-TRICHLOROPROPANE
930000U	CARBON TETRACHLORIDE	1.9E6U	O-CHLOROTOLUENE
930000U	1,2-DICHLOROETHANE	1.9E6U	P-CHLOROTOLUENE
930000U	BENZENE	1.9E6U	1,3-DICHLOROBENZENE
930000U	TRICHLOROETHENE(TRICHLOROETHYLENE)	1.9E6U	1,4-DICHLOROBENZENE
930000U	1,2-DICHLOROPROPANE	1.9E6U	1,2-DICHLOROBENZENE
930000U	DIBROMOMETHANE	40.0	PERCENT MOISTURE
930000U	BROMODICHLOROMETHANE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/13/89

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-03 SUBSURFACE SOIL #03

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1225 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
110U	CHLOROMETHANE	110U	CIS 1,3-DICHLOROPROPENE
110U	VINYL CHLORIDE	1100U	METHYL ISOBUTYL KETONE
110U	BROMOMETHANE	110U	TOLUENE
110U	CHLOROETHANE	110U	TRANS-1,3-DICHLOROPROPENE
110U	TRICHLOROFLUOROMETHANE	110U	1,1,2-TRICHLOROETHANE
110U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	110U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
1100U	ACETONE	110U	1,3-DICHLOROPROPANE
1100U	CARBON DISULFIDE	1100U	METHYL BUTYL KETONE
110U	METHYLENE CHLORIDE	110U	DIBROMOCHLOROMETHANE
110U	TRANS-1,2-DICHLOROETHENE	110U	CHLOROBENZENE
110U	1,1-DICHLOROETHANE	110U	1,1,1,2-TETRACHLOROETHANE
1100U	VINYL ACETATE	110U	ETHYL BENZENE
110U	CIS-1,2-DICHLOROETHENE	110U	(M- AND/OR P-)XYLENE
110U	2,2-DICHLOROPROPANE	110U	O-XYLENE
1100U	METHYL ETHYL KETONE	110U	STYRENE
110U	BROMOCHLOROMETHANE	110U	BROMOFORM
110U	CHLOROFORM	110U	BROMOBENZENE
110U	1,1,1-TRICHLOROETHANE	110U	1,1,2,2-TETRACHLOROETHANE
110U	1,1-DICHLOROPROPENE	110U	1,2,3-TRICHLOROPROPANE
110U	CARBON TETRACHLORIDE	110U	O-CHLOROTOLUENE
110U	1,2-DICHLOROETHANE	110U	P-CHLOROTOLUENE
110U	BENZENE	110U	1,3-DICHLOROBENZENE
110U	TRICHLOROETHENE(TRICHLOROETHYLENE)	110U	1,4-DICHLOROBENZENE
110U	1,2-DICHLOROPROPANE	110U	1,2-DICHLOROBENZENE
110U	DIBROMOMETHANE	19.0	PERCENT MOISTURE
110U	BROMODICHLOROMETHANE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/13/89

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL
PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT.
CITY: ATHENS ST: GA
STATION ID: SS-01 BACKGROUND SURFACE SOIL
COLLECTION START: 05/03/89 1530 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
39U	CHLOROMETHANE	39U	CIS-1,3-DICHLOROPROPENE
39U	VINYL CHLORIDE	390U	METHYL ISOBUTYL KETONE
39U	BROMOMETHANE	39U	TOLUENE
39U	CHLOROETHANE	39U	TRANS-1,3-DICHLOROPROPENE
39U	TRICHLOROFLUOROMETHANE	39U	1,1,2-TRICHLOROETHANE
39U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	39U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
390U	ACETONE	39U	1,3-DICHLOROPROPANE
390U	CARBON DISULFIDE	390U	METHYL BUTYL KETONE
39U	METHYLENE CHLORIDE	39U	DIBROMOCHLOROMETHANE
39U	TRANS-1,2-DICHLOROETHENE	39U	CHLOROBENZENE
39U	1,1-DICHLOROETHANE	39U	1,1,1,2-TETRACHLOROETHANE
390U	VINYL ACETATE	39U	ETHYL BENZENE
39U	CIS-1,2-DICHLOROETHENE	39U	(M- AND/OR P-)XYLENE
39U	2,2-DICHLOROPROPANE	39U	O-XYLENE
390U	METHYL ETHYL KETONE	39U	STYRENE
39U	BROMOCHLOROMETHANE	39U	BROMOFORM
39U	CHLOROFORM	39U	BROMOBENZENE
39U	1,1,1-TRICHLOROETHANE	39U	1,1,2,2-TETRACHLOROETHANE
39U	1,1-DICHLOROPROPENE	39U	1,2,3-TRICHLOROPROPANE
39U	CARBON TETRACHLORIDE	39U	O-CHLOROTOLUENE
39U	1,2-DICHLOROETHANE	39U	P-CHLOROTOLUENE
39U	BENZENE	39U	1,3-DICHLOROBENZENE
39U	TRICHLOROETHENE(TRICHLOROETHYLENE)	39U	1,4-DICHLOROBENZENE
39U	1,2-DICHLOROPROPANE	39U	1,2-DICHLOROBENZENE
39U	DIBROMOMETHANE	19.0	PERCENT MOISTURE
39U	BROMODICHLOROMETHANE		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 06/13/89

PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL COLLECTION START: 05/03/89 1550 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
46U	CHLOROMETHANE	46U	CIS-1,3-DICHLOROPROPENE
46U	VINYL CHLORIDE	460U	METHYL ISOBUTYL KETONE
46U	BROMOMETHANE	46U	TOLUENE
46U	CHLOROETHANE	46U	TRANS-1,3-DICHLOROPROPENE
46U	TRICHLOROFLUOROMETHANE	46U	1,1,2-TRICHLOROETHANE
46U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	46U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
460U	ACETONE	46U	1,3-DICHLOROPROPANE
460U	CARBON DISULFIDE	460U	METHYL BUTYL KETONE
46U	METHYLENE CHLORIDE	46U	DIBROMOCHLOROMETHANE
46U	TRANS-1,2-DICHLOROETHENE	46U	CHLOROBENZENE
46U	1,1-DICHLOROETHANE	46U	1,1,1,2-TETRACHLOROETHANE
460U	VINYL ACETATE	46U	ETHYL BENZENE
46U	CIS-1,2-DICHLOROETHENE	46U	(M- AND/OR P-)XYLENE
46U	2,2-DICHLOROPROPANE	46U	O-XYLENE
460U	METHYL ETHYL KETONE	46U	STYRENE
46U	BROMOCHLOROMETHANE	46U	BROMOFORM
46U	CHLOROFORM	46U	BROMOBENZENE
46U	1,1,1-TRICHLOROETHANE	46U	1,1,2,2-TETRACHLOROETHANE
46U	1,1-DICHLOROPROPENE	46U	1,2,3-TRICHLOROPROPANE
46U	CARBON TETRACHLORIDE	46U	O-CHLOROTOLUENE
46U	1,2-DICHLOROETHANE	46U	P-CHLOROTOLUENE
46U	BENZENE	46U	1,3-DICHLOROBENZENE
46U	TRICHLOROETHENE(TRICHLOROETHYLENE)	46U	1,4-DICHLOROBENZENE
46U	1,2-DICHLOROPROPANE	46U	1,2-DICHLOROBENZENE
46U	DIBROMOMETHANE	21.0	PERCENT MOISTURE
46U	BROMODICHLOROMETHANE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/13/89

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SD-01 BACKGROUND SEDIMENT SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1630 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
44U	CHLOROMETHANE	44U	CIS-1,3-DICHLOROPROPENE
44U	VINYL CHLORIDE	440U	METHYL ISOBUTYL KETONE
44U	BROMOMETHANE	44U	TOLUENE
44U	CHLOROETHANE	44U	TRANS-1,3-DICHLOROPROPENE
44U	TRICHLOROFLUOROMETHANE	44U	1,1,2-TRICHLOROETHANE
44U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	44U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
440U	ACETONE	44U	1,3-DICHLOROPROPANE
440U	CARBON DISULFIDE	440U	METHYL BUTYL KETONE
44U	METHYLENE CHLORIDE	44U	DIBROMOCHLOROMETHANE
44U	TRANS-1,2-DICHLOROETHENE	44U	CHLOROBENZENE
44U	1,1-DICHLOROETHANE	44U	1,1,1,2-TETRACHLOROETHANE
440U	VINYL ACETATE	44U	ETHYL BENZENE
44U	CIS-1,2-DICHLOROETHENE	44U	(M- AND/OR P-)XYLENE
44U	2,2-DICHLOROPROPANE	44U	O-XYLENE
440U	METHYL ETHYL KETONE	44U	STYRENE
44U	BROMOCHLOROMETHANE	44U	BROMOFORM
44U	CHLOROFORM	44U	BROMOBENZENE
44U	1,1,1-TRICHLOROETHANE	44U	1,1,2,2-TETRACHLOROETHANE
44U	1,1-DICHLOROPROPENE	44U	1,2,3-TRICHLOROPROPANE
44U	CARBON TETRACHLORIDE	44U	O-CHLOROTOLUENE
44U	1,2-DICHLOROETHANE	44U	P-CHLOROTOLUENE
44U	BENZENE	44U	1,3-DICHLOROBENZENE
44U	TRICHLOROETHENE(TRICHLOROETHYLENE)	44U	1,4-DICHLOROBENZENE
44U	1,2-DICHLOROPROPANE	44U	1,2-DICHLOROBENZENE
44U	DIBROMOMETHANE	33.0	PERCENT MOISTURE
44U	BROMODICHLOROMETHANE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/13/89

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SD-02 SEDIMENT SOIL #02

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1815 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
73U	CHLOROMETHANE	73U	CIS-1,3-DICHLOROPROPENE
73U	VINYL CHLORIDE	730U	METHYL ISOBUTYL KETONE
73U	BROMOMETHANE	73U	TOLUENE
73U	CHLOROETHANE	73U	TRANS-1,3-DICHLOROPROPENE
73U	TRICHLOROFLUOROMETHANE	73U	1,1,2-TRICHLOROETHANE
73U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	73U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
730U	ACETONE	73U	1,3-DICHLOROPROPANE
730U	CARBON DISULFIDE	730U	METHYL BUTYL KETONE
73U	METHYLENE CHLORIDE	73U	DIBROMOCHLOROMETHANE
73U	TRANS-1,2-DICHLOROETHENE	73U	CHLOROBENZENE
73U	1,1-DICHLOROETHANE	73U	1,1,1,2-TETRACHLOROETHANE
730U	VINYL ACETATE	73U	ETHYL BENZENE
73U	CIS-1,2-DICHLOROETHENE	73U	(M- AND/OR P-)XYLENE
73U	2,2-DICHLOROPROPANE	73U	O-XYLENE
730U	METHYL ETHYL KETONE	73U	STYRENE
73U	BROMOCHLOROMETHANE	73U	BROMOFORM
73U	CHLOROFORM	73U	BROMOBENZENE
73U	1,1,1-TRICHLOROETHANE	73U	1,1,2,2-TETRACHLOROETHANE
73U	1,1-DICHLOROPROPENE	73U	1,2,3-TRICHLOROPROPANE
73U	CARBON TETRACHLORIDE	73U	O-CHLOROTOLUENE
73U	1,2-DICHLOROETHANE	73U	P-CHLOROTOLUENE
73U	BENZENE	73U	1,3-DICHLOROBENZENE
73U	TRICHLOROETHENE(TRICHLOROETHYLENE)	73U	1,4-DICHLOROBENZENE
73U	1,2-DICHLOROPROPANE	73U	1,2-DICHLOROBENZENE
73U	DIBROMOMETHANE	48.0	PERCENT MOISTURE
73U	BROMODICHLOROMETHANE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.   06/13/89

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

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**   PROJECT NO. 89-400    SAMPLE NO. 34902  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R YOUNG            **
**   SOURCE: WESTINGHOUSE ELECT.                                      CITY: ATHENS                ST: GA                 **
**   STATION ID: SS-04 SURFACE SOIL #04                               COLLECTION START: 05/04/89  1120   STOP: 00/00/00  **
**                                                                                                                       **
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ANALYTICAL RESULTS UG/KG

5F6JN	TRIMETHYLBENZENE (3 ISOMERS)

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV
COLLEGE STATION RD.
ATHENS, GA. 30613

SISB/SAS
RECEIVED
JUN 19 1989
EPA - REGION IV
ATLANTA, GA.

*****MEMORANDUM******

DATE: 06/15/89

SUBJECT: Results of Pesticide/PCB Analysis;
89-400 WESTINGHOUSE ELECT.
ATHENS GA

FROM: Tom B. Bennett, jr.
Chief, Organic Chemistry Section

TO: PHIL BLACKWELL

Attached are the results of analysis of samples collected as part of the subject project.

If you have any questions please contact me.

ATTACHMENT

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/14/89

PESTICIDES/PCB'S DATA REPORT

** PROJECT NO. 89-400 SAMPLE NO. 34899 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SB-02 SUBSURFACE SOIL #2 COLLECTION START: 05/04/89 1005 STOP: 00/00/00 **

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
8.1U	ALDRIN	62U	PCB-1232 (AROCLOR 1232)
8.1U	HEPTACHLOR	62U	PCB-1248 (AROCLOR 1248)
8.1U	HEPTACHLOR EPOXIDE	62U	PCB-1260 (AROCLOR 1260)
8.1U	ALPHA-BHC	62U	PCB-1016 (AROCLOR 1016)
8.1U	BETA-BHC	310U	TOXAPHENE
8.1U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
8.1U	DELTA-BHC	---	ALPHA-CHLORDENE /2
8.1U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
8.1U	DIELDRIN	---	GAMMA-CHLORDENE /2
8.1J	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
8.1U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
8.1U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
8.1U	ENDRIN	---	ALPHA-CHLORDANE /2
8.1U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
8.1U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
42U	CHLORDANE (TECH. MIXTURE) /1	19U	METHOXYCHLOR
62U	PCB-1242 (AROCLOR 1242)	8.1U	ENDRIN KETONE
62U	PCB-1254 (AROCLOR 1254)	22	PERCENT MOISTURE
62U	PCB-1221 (AROCLOR 1221)		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/14/89

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-02 SURFACE SOIL #02 COLLECTION START: 05/04/89 1020 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
22U	ALDRIN	210U	PCB-1232 (AROCLOR 1232)
22U	HEPTACHLOR	210U	PCB-1248 (AROCLOR 1248)
22U	HEPTACHLOR EPOXIDE	210U	PCB-1260 (AROCLOR 1260)
22U	ALPHA-BHC	210U	PCB-1016 (AROCLOR 1016)
22U	BETA-BHC	1400U	TOXAPHENE
22U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
22U	DELTA-BHC	---	ALPHA-CHLORDENE /2
22U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
50U	DIELDRIN	---	GAMMA-CHLORDENE /2
22U	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
22U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
22U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
22U	ENDRIN	---	ALPHA-CHLORDANE /2
22U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
310U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
97U	CHLORDANE (TECH. MIXTURE) /1	79U	METHOXYCHLOR
210U	PCB-1242 (AROCLOR 1242)	33U	ENDRIN KETONE
210U	PCB-1254 (AROCLOR 1254)	14	PERCENT MOISTURE
210U	PCB-1221 (AROCLOR 1221)		

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/14/89

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-03 SURFACE SOIL #03

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1035 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
48	ALDRIN
86U	HEPTACHLOR
28U	HEPTACHLOR EPOXIDE
28U	ALPHA-BHC
160U	BETA-BHC
44U	GAMMA BHC (LINDANE)
28U	DELTA-BHC
60U	ENDOSULFAN I (ALPHA)
43J	DIELDRIN
28U	4,4'-DDT (P,P'-DDT)
66U	4,4'-DDE (P,P'-DDE)
74	4,4'-DDD (P,P'-DDD)
48U	ENDRIN
48U	ENDOSULFAN II (BETA)
48U	ENDOSULFAN SULFATE
250U	CHLORDANE (TECH. MIXTURE) /1
1100	PCB-1242 (AROCLOR 1242)
300U	PCB-1254 (AROCLOR 1254)
1000U	PCB-1221 (AROCLOR 1221)

UG/KG	ANALYTICAL RESULTS
1000U	PCB-1232 (AROCLOR 1232)
1000U	PCB-1248 (AROCLOR 1248)
350JN	PCB-1260 (AROCLOR 1260)
1000U	PCB-1016 (AROCLOR 1016)
1500U	TOXAPHENE
---	CHLORDENE /2
---	ALPHA-CHLORDENE /2
---	BETA CHLORDENE /2
---	GAMMA-CHLORDENE /2
---	1-HYDROXYCHLORDENE /2
---	GAMMA-CHLORDANE /2
---	TRANS-NONACHLOR /2
---	ALPHA-CHLORDANE /2
---	CIS-NONACHLOR /2
---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
68U	METHOXYCHLOR
28U	ENDRIN KETONE
33	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/14/89

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-04 SURFACE SOIL #04

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1120 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
23	ALDRIN
33U	HEPTACHLOR
41U	HEPTACHLOR EPOXIDE
41U	ALPHA-BHC
41U	BETA-BHC
41U	GAMMA-BHC (LINDANE)
41U	DELTA-BHC
41U	ENDOSULFAN I (ALPHA)
66	DIELDRIN
79U	4,4'-DDT (P,P'-DDT)
94U	4,4'-DDE (P,P'-DDE)
79U	4,4'-DDD (P,P'-DDD)
79U	ENDRIN
79U	ENDOSULFAN II (BETA)
150U	ENDOSULFAN SULFATE
220U	CHLORDANE (TECH. MIXTURE) /1
440U	PCB-1242 (AROCLOR 1242)
440U	PCB-1254 (AROCLOR 1254)
440U	PCB-1221 (AROCLOR 1221)

UG/KG	ANALYTICAL RESULTS
440U	PCB-1232 (AROCLOR 1232)
440U	PCB-1248 (AROCLOR 1248)
440U	PCB-1260 (AROCLOR 1260)
440U	PCB-1016 (AROCLOR 1016)
1600U	TOXAPHENE
---	CHLORDENE /2
---	ALPHA-CHLORDENE /2
---	BETA CHLORDENE /2
---	GAMMA-CHLORDENE /2
---	1-HYDROXYCHLORDENE /2
---	GAMMA-CHLORDANE /2
---	TRANS-NONACHLOR /2
---	ALPHA-CHLORDANE /2
---	CIS-NONACHLOR /2
---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
250U	METHOXYCHLOR
100U	ENDRIN KETONE
40	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/14/89

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-03 SUBSURFACE SOIL #03 COLLECTION START: 05/04/89 1225 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
8.1U	ALDRIN	62U	PCB-1232 (AROCLOR 1232)
8.1U	HEPTACHLOR	62U	PCB-1248 (AROCLOR 1248)
8.1U	HEPTACHLOR EPOXIDE	62U	PCB-1260 (AROCLOR 1260)
8.1U	ALPHA-BHC	62U	PCB-1016 (AROCLOR 1016)
8.1U	BETA-BHC	310U	TOXAPHENE
8.1U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
8.1U	DELTA-BHC	---	ALPHA-CHLORDENE /2
8.1U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
8.1U	DIELDRIN	---	GAMMA-CHLORDENE /2
8.1U	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
8.1U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
8.1U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
8.1U	ENDRIN	---	ALPHA-CHLORDANE /2
8.1U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
8.1U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
42U	CHLORDANE (TECH. MIXTURE) /1	19U	METHOXYCHLOR
62U	PCB-1242 (AROCLOR 1242)	8.1U	ENDRIN KETONE
62U	PCB-1254 (AROCLOR 1254)	19	PERCENT MOISTURE
62U	PCB-1221 (AROCLOR 1221)		

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA. 06/14/89

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-01 BACKGROUND SURFACE SOIL COLLECTION START: 05/03/89 1530 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
8.1UJ	ALDRIN	62UJ	PCB-1232 (AROCLOR 1232)
8.1UJ	HEPTACHLOR	62UJ	PCB-1248 (AROCLOR 1248)
8.1UJ	HEPTACHLOR EPOXIDE	62UJ	PCB-1260 (AROCLOR 1260)
8.1UJ	ALPHA-BHC	62UJ	PCB-1016 (AROCLOR 1016)
8.1UJ	BETA-BHC	310UJ	TOXAPHENE
8.1UJ	GAMMA-BHC (LINDANE)	---	CHLORDENE /2
8.1UJ	DELTA-BHC	---	ALPHA-CHLORDENE /2
8.1UJ	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
8.1UJ	DIELDRIN	---	GAMMA-CHLORDENE /2
8.1UJ	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
8.1UJ	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
8.1UJ	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
8.1UJ	ENDRIN	---	ALPHA-CHLORDANE /2
8.1UJ	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
8.1UJ	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
42UJ	CHLORDANE (TECH. MIXTURE) /1	19UJ	METHOXYCHLOR
62UJ	PCB-1242 (AROCLOR 1242)	8.1UJ	ENDRIN KETONE
62UJ	PCB-1254 (AROCLOR 1254)	19	PERCENT MOISTURE
62UJ	PCB-1221 (AROCLOR 1221)		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/14/89

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1550 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
8.1U	ALDRIN	62U	PCB-1232 (AROCLOR 1232)
27U	HEPTACHLOR	62U	PCB-1248 (AROCLOR 1248)
8.1U	HEPTACHLOR EPOXIDE	62U	PCB-1260 (AROCLOR 1260)
8.1U	ALPHA-BHC	62U	PCB-1016 (AROCLOR 1016)
8.1U	BETA-BHC	310U	TOXAPHENE
8.1U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
8.1U	DELTA-BHC	---	ALPHA-CHLORDENE /2
8.1U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
8.1U	DIELDRIN	---	GAMMA-CHLORDENE /2
8.1U	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
8.1U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
8.1U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
8.1U	ENDRIN	---	ALPHA-CHLORDANE /2
8.1U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
8.1U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
42U	CHLORDANE (TECH. MIXTURE) /1	19U	METHOXYCHLOR
62U	PCB-1242 (AROCLOR 1242)	8.1U	ENDRIN KETONE
62U	PCB-1254 (AROCLOR 1254)	21	PERCENT MOISTURE
62U	PCB-1221 (AROCLOR 1221)		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.   06/14/89

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 89-400   SAMPLE NO. 34906   SAMPLE TYPE: SOIL   PROG ELEM: NSF   COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT.   CITY: ATHENS   ST: GA
STATION ID: SD-01 BACKGROUND SEDIMENT SOIL   COLLECTION START: 05/03/89 1630   STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
9.5U	ALDRIN	73U	PCB-1232 (AROCLOR 1232)
9.5U	HEPTACHLOR	73U	PCB-1248 (AROCLOR 1248)
9.5U	HEPTACHLOR EPOXIDE	73U	PCB-1260 (AROCLOR 1260)
9.5U	ALPHA-BHC	73U	PCB-1016 (AROCLOR 1016)
9.5U	BETA-BHC	360U	TOXAPHENE
9.5U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
9.5U	DELTA-BHC	---	ALPHA-CHLORDENE /2
9.5U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
9.5U	DIELDRIN	---	GAMMA-CHLORDENE /2
9.5U	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
9.5U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
9.5U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
9.5U	ENDRIN	---	ALPHA-CHLORDANE /2
9.5U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
9.5U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
49U	CHLORDANE (TECH. MIXTURE) /1	22U	METHOXYCHLOR
73U	PCB-1242 (AROCLOR 1242)	9.5U	ENDRIN KETONE
73U	PCB-1254 (AROCLOR 1254)	33	PERCENT MOISTURE
73U	PCB-1221 (AROCLOR 1221)		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/14/89

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SD-02 SEDIMENT SOIL #02 COLLECTION START: 05/03/89 1815 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
12U	ALDRIN	90U	PCB-1232 (AROCLOR 1232)
12U	HEPTACHLOR	90U	PCB-1248 (AROCLOR 1248)
12U	HEPTACHLOR EPOXIDE	90U	PCB-1260 (AROCLOR 1260)
12U	ALPHA-BHC	90U	PCB-1016 (AROCLOR 1016)
12U	BETA-BHC	450U	TOXAPHENE
12U	GAMMA-BHC (LINDANE)	---	CHLORDENE /2
12U	DELTA-BHC	---	ALPHA-CHLORDENE /2
12U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
12U	DIELDRIN	---	GAMMA-CHLORDENE /2
12U	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
12U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
12U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
12U	ENDRIN	---	ALPHA-CHLORDANE /2
12U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
12U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
61U	CHLORDANE (TECH. MIXTURE) /1	28U	METHOXYCHLOR
90U	PCB-1242 (AROCLOR 1242)	12U	ENDRIN KETONE
90U	PCB-1254 (AROCLOR 1254)	48	PERCENT MOISTURE
90U	PCB-1221 (AROCLOR 1221)		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

/SAS
RECEIVED
FEB 20 1991
EPA - REGION IV

REPLY TO ATTENTION OF:

Date: FEB 13 1990

TO: Regional Site Assessment Manager Contacts

FROM: Linda Martin, SAM Region

RE: Kick off Conference Call for the National Site Assessment Managers Association (NSAMA)

I really appreciate all the interest shown for the NSAMA in Santa Fe, NM. I was able to get one contact person from each Regional office. Thank you!

I am writing this memo to get started on organizing this Association. I have enclosed a list of names and address for each contact person along with a draft agenda for our first call. I would like to hold the call on Feb 25 or Feb 28 from 1 to 3pm eastern time. Please let me know ASAP which date you prefer. If for some reason you can not attend please have someone else from your region sit in on the call. I will forward details on the call as soon as they are available. If there are any changes to the Contact list or if you have any other agenda items you wish to add please let me know.

Also for your review, I have attached a copy of a proposed SAM survey and copies of the RPM association charter and By Laws. I thought that we could develop our charter and by laws from this example. You might want to collect ideas from other SAMs in your region to present during this call. If you have any further questions or concerns about anything please feel free to contact me (FTS 353-9486). Thank you for your help.

Attachments

CC. Section Chiefs Regions 1-10
Suzanne Wells, HQ
Penney Hansen, HQ

I will arrange a conference room when I get the exact date for conf. call. Out in Santa Fe I was appointed contact, but I think this is something we are all interested in. Please complete the survey and return to me, ASAP.

Debbie

Printed on Recycled Paper

DRAFT AGENDA

- Define a SAM
  - What does a SAM do
  - what does each region define as a SAM
  - Gear this to be a professional organization

- SAM Survey
  - Is this needed
  - Ideas on changes
  - Volunteer to compile data
  - Make a SAm directory out of the data

- RPM Charter
  - should we use as a base for our charter
  - Volunteer to draft SAM charter

- RPM By Laws
  - Should we use as a base for our by laws
  - Volunteer to draft SAM by laws

- Other items of concern

- Next call

SAM SURVEY

Objective: To determine if Superfund SAM's are interested in forming a national organization, Once collated, the results will be returned to the Regions. Information from this and other surveys might also be used to develop a SAM directory. Thank you for your assistance.

SAM Name: ______________________________

Phone #: ________________ Region: ____ Mail Code: ________

1. Would a national organization for SAMs be beneficial?
   YES NO

2. Would you participate in such an organization?
   YES NO

3. What priorities/goals should a SAM organization have?

   Career Development ___
   Technical Assistance/transfer ___
   Networking ___
   Sharing of experiences ___
   Information Clearing House ___
   Other ______________________________
   ____

4. Should a regular national meeting be held? YES NO

5. How frequently should a national meeting be held? YEARLY___
   Twice a Year ___
   Other ___

6. What committees might be formed to address SAM issues?

   Career Development _____
   Communication _____
   Training/education _____
   Technical Transfer _____
   Other _________________________

7. Any other comments/questions/ideas?

NATIONAL ASSOCIATION OF REMEDIAL PROJECT MANAGERS

I. STATEMENT OF ESTABLISHMENT

On this day the United States Environmental Protection Agency's (EPA) Remedial Project Managers (RPM's) have assembled to formalize their establishment of the National Association of Remedial Project Managers (NARPM).

II. STATEMENT OF PURPOSE

The NARPM is expressly chartered to the following purposes:

A. To further the professional development of its membership, more specifically:

1. To foster and encourage in its members the finest professional work ethic.

2. To stimulate its members to produce work of outstanding professional quality and technical competence.

3. To recognize outstanding professional achievement among its membership.

4. To encourage its members to maintain and further develop their technical base and their knowledge of the state of the art through continued learning.

5. To foster public and private awareness of the technical competence and professional achievement of its membership.

B. To stimulate among its membership a justifiable pride in the value to humanity of the professional work they do, including:

1. Actions taken in defense of public health and life.

2. Actions taken in defense of our environment.

3. Actions taken in defense of public welfare and property.

C. To seek and foster technical excellence by:

1. Encouraging intra- and inter-Regional technology transfer and disseminating theoretical and practical information regarding innovative technical applications to current and future remedial response actions.

2. Encouraging direct communication between RPMs regarding work in progress, with special emphasis on methodology.

3. Encouraging RPM participation in Agency innovative technology demonstration projects.

D. To improve communication and interaction between the Regions and with Headquarters by:

1. Stimulating ongoing dialogue among RPMs through the scheduling, planning, and conducting of National RPM conferences on a bi-annual basis, and other periodic area or zone activities as needed.

2. Providing a National forum for dialogue and consensus regarding issues of ongoing and current concern to RPMs, and regarding potential solutions to matters affecting their work and their careers.

3. Providing recommendations to the Agency for consideration of such proposed consensus solutions to problems affecting RPMs.

E. To establish and nurture a sense of unity, purpose and teamwork among RPMs.

To the above purposes the undersigned to subscribe, and in witness thereto set their hands, that this National Association of Remedial Project Managers be established on this _____ day of __________ 1989.

ATTACHMENTS

NARPM Interim Bylaws

I. Statement of Intent

These Interim Bylaws are established and approved by a majority vote of the Regional Representatives of the National Association of Remedial Project Managers, with the intent that they shall serve the purposes of NARPM as contained in the Charter, until such time as first National Conference of NARPM is held.

II. Membership in NARPM

A. Membership, except as modified below, is limited to Remedial Project Managers employed by the U.S. Environmental Protection Agency, engaged in or supervising oil or hazardous materials incident response activities as provided under Federal law.

B. Membership in this Association shall cease on the effective date of resignation from the U.S. Environmental Protection Agency or transfer to duties other than as provided under II-A, above.

C. Membership, as defined (II-A) above, shall be considered active. Members retiring from Federal service or detached from qualifying duty for over 365 days may, upon written request, remain as inactive members.

D. Active memberships may be granted by NARPM Council balloting following receipt of voluntary request, verbal or written, from qualified persons (per II-A above), and upon payment of NARPM dues as defined below.

E. Voting shall be restricted to active members.

F. Honorary membership may, from time to time, be granted to any person deemed by the active membership by majority (IV-F) vote to have demonstrated outstanding dedication to environmental conservation or to the chartered purposes of this Association. (See II-G and V-H of these bylaws).

G. Honorary membership granted by this Association shall become effective only upon receipt of written acceptance from the grantee, or from heirs or assigns of the grantee.

H. Membership may be revoked for cause (actions unbecoming an RPM). A revocation action should be: initiated PER IV-H below, by a majority of the elected council members and confirmed by a majority vote (IV-E below). Should such unbecoming conduct be attributed to (a) council member(s), then any three (3) active members acting together may refer the issue of revocation to the active membership, detailing the charge. Any active member referred for revocation shall have: the right to vote on the matter, a copy of the charge and 60 days to present refuting testimony to the active membership prior to the start of the 30 day balloting period. Revocation of (a) council member(s) shall initiate the balloting period for replacement. The elected replacement council member(s) shall be, for this purpose only, exempt from the provisions of III-C and II-D, below, and shall serve only the remainder of the revoked council member(s) term(s).

I. Active membership in this Association may be involuntarily or voluntarily converted to inactive membership for reasons of nonparticipation. For this purpose, participation shall be deemed to include voting during the year in at least 50% of the general ballotings, attendance at a minimum of one Regional or National meeting per year, and payment of dues established elsewhere in these Bylaws.

III. Organization of NARPM

A. This Association is founded squarely upon its active membership, which is its own governing body. In consequence, all major decisions shall be taken by, and in accord with, a balloting of the active members by name against the roster.

B. Since it is impractical to frequently assemble the entire active membership, a representative council shall be elected by the active membership. The council shall consist of fourteen active members, one of which shall be Chair, one Vice Chair, one Treasurer, one Secretary, and ten Regional Representatives. The chartering election balloting shall elect the Chair, Vice Chair, Treasurer and Secretary for two years and the Regional Representatives for one year. Subsequent elections shall select the appropriate replacement council members to serve two year terms and shall be held prior to 30 days from the end of the term, thus guaranteeing a continuity of current experience on the council. Regional Representatives will be elected by majority vote of each region's active membership. Should a Regional Representative be unable to attend a council meeting, he/she may designate an alternate RPM to serve for this purpose.

C. Since the purpose of the Council is to serve and involve the active membership, no council member shall serve more than one council term in any four year period.

IV. NARPM Balloting Procedures, Membership Vote

A. Balloting shall be by written, signed vote on a simple form.

B. Ballots shall normally be cast by placing them in the ballot box, in the NARPM Secretary's office, or alternately by mailing the ballot to the NARPM Secretary.

C. Ballots shall be counted, within 30 days of the ballot date, by the NARPM Secretary or, in the case of revocation, by any 3 active members assembled, and reported to the NARPM Council within 30 additional days.

D. Balloting shall require a quorum, with over 50% of the active membership voting, in order to constitute a valid vote.

E. A majority vote shall consist of quorum plus agreement, pro or con, by over 50% of the total active membership.

F. A unanimous vote shall consist of agreement, pro or con, of all the non-abstaining ballots cast, quorum per IV-D, and majority per IV-E above.

G. Ballots shall allow each active member to vote approval (pro) or disapproval (con) on any issue, or to abstain. Ballots cast abstaining shall count toward quorum and shall constitute participation (II-I) in the balloting.

H. Issues requiring balloting shall be presented to the council chair by any active member, in writing. No issue shall be presented to the active membership for balloting without prior majority agreement of the council, except as provided in II-H, above.

I. Ballots may be accompanied (covered) by a copy of the issue request, IV-H, above, but shall contain title and summary of the issue, and shall be cast alone.

J. Issues presented to the active membership and requiring a consensus/majority vote shall be considered approved if the required majority (IV-E) votes approval (pro), shall be considered disapproved if the required majority votes disapproval (con) and shall be considered tabled if no quorum is achieved within 30 days, or if neither "pro" nor "con" receives a majority (per IV-E). Tabled issues shall not be re-balloted unless re-presented per IV-H, above.

K. Issues of proposed change to the Charter, Bylaws or annual dues shall be decided by active membership vote.

V. Balloting Procedure, NARPM Council

A. Balloting per IV-A.

B. Ballots cast shall be mailed to the NARPM Secretary, except for balloting conducted during a council meeting.

C. Ballots shall be tallied by the Secretary, and original ballots verified at the next RPM Conference or NARPM Council meeting, whichever comes first.

D. Results of NARPM Council decisions, recommendations, or discussions shall be reported to the Regional Representatives within 60 days of the balloting period established by the Council.

E. Matters of simple funding disbursal under $500.00 shall be decided by council balloting alone. Matters of minor petty cash (under $100.00) disbursal shall not require balloting and may be authorized by any two officers.

F. Matters of funding disbursal over $500.00 shall be presented for membership vote per IV-A through K, above, excepting initial incorporation costs, which are approved herewith.

G. On matters of national import or controversial nature, the council may opt to present the issue(s) for membership balloting per IV-A through K, above.

H. Honorary membership can be granted by council balloting in response to a proposal from a Regional Representative.

I. The Chair will not ordinarily vote in matters requiring council balloting unless balloting results in a tie vote, in which case the Chair will break the tie.

VI. DUES

A. Chartering Fee: A (one time) chartering fee in the amount of $10.00 will be paid by each new member as a condition of membership, to cover costs of incorporation.

B. Annual Dues: Annual dues are hereby established at $10.00 per year, payable by active members only.

C. Non-payment of annual dues within the time period established below shall automatically convert membership to inactive (II-I).

D. Dues shall be payable by check or money order within the first quarter of each fiscal year, beginning fiscal year 1990.

E. In the event of dissolution of this association, the net assets thereof shall be distributed evenly among the active membership of record at the time of dissolution, conformance with applicable state laws of the state in which NARPM is incorporated, and with IRS regulation section 1.501(c)(3)-1(b)4 for the dissolution and distribution of such assets.

VII. USE OF ASSOCIATION ASSETS

Disbursal or disposal of assets of this association shall be limited to the necessary costs of attainment of the purposes detailed in the charter, and to the ability of the association to pay, except as provided in VI-E, above.

VIII. AUTHORIZATION OF THESE BYLAWS

These Interim bylaws are appended to the NARPM Charter, and authorized by the chartering members by signatures affixed to the charter and by roll call vote of the eleven assembled authorized regional representatives, on this 22nd day of June, 1989 in Atlanta, Georgia, as attested by their signatures below.

REGION	REPRESENTATIVE SIGNATURE	REPRESENTATIVE PRINTED NAME
I		
II		
III		
IV	Jon K Bornholm	Jon K Bornholm
V	Ken Tindall	Ken Tindall
VI		
VII	Steve A. Kovac	Steve A. Kovac
VIII	Marie B. Zanovick	MARIE B. ZANOVICK
IX		
X	David A Tetta	DAVID A. TETTA

SITE ASSESSMENT ASSOCIATION
REGIONAL CONTACT LIST

Region 1

Jane Anderson
USEPA
J.F. Kennedy Fed. Bld
Mail Code: Hss-can-7
Boston, MS 02203

FTS 833-1698

Region 2

Ben Conetta
USEPA
26 Federal Plaza
Mail Code: RM 13-100
New York, NY 10278

FTS 264-6696

Region 3

Lorie Acker
USEPA
841 Chestnut Buldg.
Mail Code: 3HW13
Philadelphia, PA 19107

FTS 597-3165

Region 4

Debbie Vaughn-Wright
USEPA
345 Courtland Street
Mail Code:
Atlanta, Ga. 30365

FTS 347-5065

Region 5

Linda Martin
USEPA
230 S Dearborn
Mail Code: 5HS TUB 7
Chicago, Il 60604

FTS 353-9486

Region 6

Barbara Driscoll
USEPA
1445 Ross Avenue
Mail Code: 6H MA
Dallas, TX 75202

FTS

Ed Sierra
USEPA
FTS 255-6491

Region 7

Peter Culver
USEPA
726 Minnesota Ave
Mail Code:
Kansas City, KS 66101

FTS 276-7707

Region 8

Pat Smith
USEPA
999 18th street, Suite 500
Mail Code: 8HWM-SM
Denver, CO 80802

FTS 330-1262

Region 9

Carolyn Douglas
USEPA
75 Hawthorne
Mail Code:
San Francisco, CA 94105

FTS 744-2343

Region 10

Deborah Flood
USEPA
1200 Sixth Ave
Mail Code: HW-093
Seattle, WA 98101

FTS 399-2722

Headquarter

Tina Maragousis
USEPA
Mail Code: OS 230
401 M Street S.W.
Washington, D.C. 20460

FTS 382-7393

page __ of __

Station 0,0
SW corner

MAG FIELD DATA SHEET

STATION X	STATION Y	Reading	Reading	Reading	Average (gammas)	Comments
0	0	52690				
0	1	52453				
0	2	52569				
0	3	52765				
0	4	52540				
0	5	52727				
0	6	53146				
0	7	52736				
0	8	52447				
0	9	52575				
0	10	53123				
0	11	52195				
0	12	52396				
1	0	52625				
1	1	52716				
1	2	52616				
	3	52614				
	4	52772				
	5	52899				
	6	53277				
	7	*53427				
	8	52249				
	9	51793				
	10					
	11					

12

* Field data sheet is an extension of Geophysical Logbook ____________.

Location ______________________

page __ of __

MAG FIELD DATA SHEET

STATION						
X	Y	Reading	Reading	Reading	Average (gammas)	Comments
SW corner 2	0	52602				
	1	52641				
	2	52679				
	3	52751				
	4	52848				
	5	52532				
	6	52483				
	7	52407				
	8	52348				
	9	52486				
	10	52516				
SW corner 3	0	52642				
	1	52613				
	2	52556				
	3	52641				
	4	*52744				
	5	52486				
	6	52591				
	7	52488				
	8	52502				
✓	9	52538				
4	0	52572				
	1	52545				
	2	52623				
	3	52771				

* Field data sheet is an extension of Geophysical Logbook ________.

Location ____________________

NUS
CORPORATION

1927 LAKESIDE PARKWAY
SUITE 614
TUCKER, GEORGIA 30084
404-938-7710

COMPLETE
ENG.

Received
JUN 02 1989
SISB/SAS

C-586-5-9-202

May 31, 1989

Mr. Ken Lucas
Site Investigation and Support Branch
Waste Management Division
Environmental Protection Agency
345 Courtland Street, N. E.
Atlanta, Georgia 30365

Subject: Westinghouse Electric Corporation
Athens, Clarke County, Georgia
TDD No. F4-8903-40

Dear Mr. Lucas:

Previous to the Screening Site Inspection field activities, an onsite reconnaissance was performed at the Westinghouse Electric Corporation landfill. Boundaries of the landfill were identified during the reconnaissance. However, the exact locations of subsurface waste materials were still unknown. Since subsurface soil sampling was scheduled to be conducted at the landfill during the Screening Site Inspection, we wanted to outline accurately waste materials via a geophysical screening. The reason being that site history indicated the presence of buried drums, and we did not intend to auger into the unknown. Exact sampling locations would be determined after delineating subsurface disposal areas.

If you have further questions regarding rationale for the geophysical screening study at Westinghouse, please call me at NUS Corporation.

Very truly yours,

Rebecca Hoffmann

Rebecca Hoffmann
Project Manager

RH/kw

Approved:

Greg Schank

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV
COLLEGE STATION RD.
ATHENS, GA. 30613

*****MEMORANDUM******

DATE: 05/31/89

SUBJECT: Results of Purgeable Organic Analysis;
89-400 WESTINGHOUSE ELECT.
ATHENS GA

FROM: Tom B. Bennett, jr.
Chief, Organic Chemistry Section

TO: PHIL BLACKWELL

Attached are the results of analysis of samples collected as part of the subject project.

If you have any questions please contact me.

ATTACHMENT

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/30/89

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34899 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-02 SUBSURFACE SOIL #2

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1005 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
41U	CHLOROMETHANE	41U	CIS-1,3-DICHLOROPROPENE
41U	VINYL CHLORIDE	410U	METHYL ISOBUTYL KETONE
41U	BROMOMETHANE	41U	TOLUENE
41U	CHLOROETHANE	41U	TRANS-1,3-DICHLOROPROPENE
41U	TRICHLOROFLUOROMETHANE	41U	1,1,2-TRICHLOROETHANE
41U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	41U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
410U	ACETONE	41U	1,3-DICHLOROPROPANE
410U	CARBON DISULFIDE	410U	METHYL BUTYL KETONE
41U	METHYLENE CHLORIDE	41U	DIBROMOCHLOROMETHANE
41U	TRANS-1,2-DICHLOROETHENE	41U	CHLOROBENZENE
41U	1,1-DICHLOROETHANE	41U	1,1,1,2-TETRACHLOROETHANE
410U	VINYL ACETATE	41U	ETHYL BENZENE
41U	CIS-1,2-DICHLOROETHENE	41U	(M- AND/OR P-)XYLENE
41U	2,2-DICHLOROPROPANE	41U	O-XYLENE
410U	METHYL ETHYL KETONE	41U	STYRENE
41U	BROMOCHLOROMETHANE	41U	BROMOFORM
41U	CHLOROFORM	41U	BROMOBENZENE
41U	1,1,1-TRICHLOROETHANE	41U	1,1,2,2-TETRACHLOROETHANE
41U	1,1-DICHLOROPROPENE	41U	1,2,3-TRICHLOROPROPANE
41U	CARBON TETRACHLORIDE	41U	O-CHLOROTOLUENE
41U	1,2-DICHLOROETHANE	41U	P-CHLOROTOLUENE
41U	BENZENE	41U	1,3-DICHLOROBENZENE
41U	TRICHLOROETHENE(TRICHLOROETHYLENE)	41U	1,4-DICHLOROBENZENE
41U	1,2-DICHLOROPROPANE	41U	1,2-DICHLOROBENZENE
41U	DIBROMOMETHANE	22.0	PERCENT MOISTURE
41U	BROMODICHLOROMETHANE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 05/30/89

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-02 SURFACE SOIL #02 COLLECTION START: 05/04/89 1020 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
41U	CHLOROMETHANE	41U	CIS-1,3-DICHLOROPROPENE
41U	VINYL CHLORIDE	410U	METHYL ISOBUTYL KETONE
41U	BROMOMETHANE	41U	TOLUENE
41U	CHLOROETHANE	41U	TRANS-1,3-DICHLOROPROPENE
41U	TRICHLOROFLUOROMETHANE	41U	1,1,2-TRICHLOROETHANE
41U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	41U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
410U	ACETONE	41U	1,3-DICHLOROPROPANE
410U	CARBON DISULFIDE	410U	METHYL BUTYL KETONE
41U	METHYLENE CHLORIDE	41U	DIBROMOCHLOROMETHANE
41U	TRANS-1,2-DICHLOROETHENE	41U	CHLOROBENZENE
41U	1,1-DICHLOROETHANE	41U	1,1,1,2-TETRACHLOROETHANE
410U	VINYL ACETATE	41U	ETHYL BENZENE
41U	CIS-1,2-DICHLOROETHENE	41U	(M- AND/OR P-)XYLENE
41U	2,2-DICHLOROPROPANE	41U	O-XYLENE
410U	METHYL ETHYL KETONE	41U	STYRENE
41U	BROMOCHLOROMETHANE	41U	BROMOFORM
41U	CHLOROFORM	41U	BROMOBENZENE
41U	1,1,1-TRICHLOROETHANE	41U	1,1,2,2-TETRACHLOROETHANE
41U	1,1-DICHLOROPROPENE	41U	1,2,3-TRICHLOROPROPANE
41U	CARBON TETRACHLORIDE	41U	O-CHLOROTOLUENE
41U	1,2-DICHLOROETHANE	41U	P-CHLOROTOLUENE
41U	BENZENE	41U	1,3-DICHLOROBENZENE
41U	TRICHLOROETHENE(TRICHLOROETHYLENE)	41U	1,4-DICHLOROBENZENE
41U	1,2-DICHLOROPROPANE	41U	1,2-DICHLOROBENZENE
41U	DIBROMOMETHANE	14.0	PERCENT MOISTURE
41U	BROMODICHLOROMETHANE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/30/89

PURGEABLE ORGANICS DATA REPORT

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** PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SS-03 SURFACE SOIL #03 COLLECTION START: 05/04/89 1035 STOP: 00/00/00 **
** **

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UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
160U	CHLOROMETHANE	160U	CIS-1,3-DICHLOROPROPENE
160U	VINYL CHLORIDE	1600U	METHYL ISOBUTYL KETONE
160U	BROMOMETHANE	160U	TOLUENE
160U	CHLOROETHANE	160U	TRANS-1,3-DICHLOROPROPENE
160U	TRICHLOROFLUOROMETHANE	160U	1,1,2-TRICHLOROETHANE
160U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	160U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
1600U	ACETONE	160U	1,3-DICHLOROPROPANE
1600U	CARBON DISULFIDE	1600U	METHYL BUTYL KETONE
160U	METHYLENE CHLORIDE	160U	DIBROMOCHLOROMETHANE
160U	TRANS-1,2-DICHLOROETHENE	160U	CHLOROBENZENE
160U	1,1-DICHLOROETHANE	160U	1,1,1,2-TETRACHLOROETHANE
1600U	VINYL ACETATE	160U	ETHYL BENZENE
160U	CIS-1,2-DICHLOROETHENE	160U	(M- AND/OR P-)XYLENE
160U	2,2-DICHLOROPROPANE	81J	O-XYLENE
1600U	METHYL ETHYL KETONE	160U	STYRENE
160U	BROMOCHLOROMETHANE	160U	BROMOFORM
160U	CHLOROFORM	160U	BROMOBENZENE
160U	1,1,1-TRICHLOROETHANE	160U	1,1,2,2-TETRACHLOROETHANE
160U	1,1-DICHLOROPROPENE	160U	1,2,3-TRICHLOROPROPANE
160U	CARBON TETRACHLORIDE	160U	O-CHLOROTOLUENE
160U	1,2-DICHLOROETHANE	160U	P-CHLOROTOLUENE
160U	BENZENE	160U	1,3-DICHLOROBENZENE
160U	TRICHLOROETHENE(TRICHLOROETHYLENE)	160U	1,4-DICHLOROBENZENE
160U	1,2-DICHLOROPROPANE	160U	1,2-DICHLOROBENZENE
160U	DIBROMOMETHANE	33.0	PERCENT MOISTURE
160U	BROMODICHLOROMETHANE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/30/89

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

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**   PROJECT NO. 89-400    SAMPLE NO. 34901  SAMPLE TYPE: SOIL        PROG ELEM: NSF    COLLECTED BY: R YOUNG                **
**   SOURCE: WESTINGHOUSE ELECT.                                      CITY: ATHENS                     ST: GA                **
**   STATION ID: SS-03 SURFACE SOIL #03                               COLLECTION START: 05/04/89  1035   STOP: 00/00/00      **
**                                                                                                                           **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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ANALYTICAL RESULTS UG/KG

200JN	TRIMETHYLBENZENE
N	PETROLEUM PRODUCT

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV
COLLEGE STATION RD.
ATHENS, GA. 30613

*****MEMORANDUM******

DATE: 06/09/89

SUBJECT: Results of Extractable Organic Analysis;
89-400 WESTINGHOUSE ELECT.
ATHENS GA

FROM: Tom B. Bennett, jr.
Chief, Organic Chemistry Section

TO: PHIL BLACKWELL

Attached are the results of analysis of samples collected as part of the subject project.

If you have any questions please contact me.

ATTACHMENT

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34899 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-02 SUBSURFACE SOIL #2 COLLECTION START: 05/04/89 1005 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
1700U	BIS(2-CHLOROETHYL) ETHER	1700U	FLUORANTHENE
1700U	BIS(2-CHLOROISOPROPYL) ETHER	1700U	PYRENE
1700U	N-NITROSODI-N-PROPYLAMINE	1700U	BENZYL BUTYL PHTHALATE
1700U	HEXACHLOROETHANE	1700U	3,3'-DICHLOROBENZIDINE
1700U	NITROBENZENE	1700U	BENZO(A)ANTHRACENE
1700U	ISOPHORONE	1700U	CHRYSENE
1700U	BIS(2-CHLOROETHOXY) METHANE	1700U	BIS(2-ETHYLHEXYL) PHTHALATE
1700U	1,2,4-TRICHLOROBENZENE	1700U	DI-N-OCTYLPHTHALATE
1700U	NAPHTHALENE	170J	BENZO(B AND/OR K)FLUORANTHENE
1700U	4-CHLOROANILINE	1700U	BENZO-A-PYRENE
1700U	HEXACHLOROBUTADIENE	1700U	INDENO (1,2,3-CD) PYRENE
1700U	2-METHYLNAPHTHALENE	1700U	DIBENZO(A,H)ANTHRACENE
1700U	HEXACHLOROCYCLOPENTADIENE (HCCP)	1700U	BENZO(GHI)PERYLENE
1700U	2-CHLORONAPHTHALENE	1700U	PHENOL
1700U	2-NITROANILINE	1700U	2-CHLOROPHENOL
1700U	DIMETHYL PHTHALATE	3400U	BENZYL ALCOHOL
1700U	ACENAPHTHYLENE	1700U	2-METHYLPHENOL
1700U	2,6-DINITROTOLUENE	1700U	(3-AND/OR 4-)METHYLPHENOL
1700U	3-NITROANILINE	1700U	2-NITROPHENOL
1700U	ACENAPHTHENE	1700U	2,4-DIMETHYLPHENOL
1700U	DIBENZOFURAN	3400U	BENZOIC ACID
1700U	2,4-DINITROTOLUENE	1700U	2,4-DICHLOROPHENOL
1700U	DIETHYL PHTHALATE	1700U	4-CHLORO-3-METHYLPHENOL
1700U	FLUORENE	1700U	2,4,6-TRICHLOROPHENOL
1700U	4-CHLOROPHENYL PHENYL ETHER	1700U	2,4,5-TRICHLOROPHENOL
1700U	4-NITROANILINE	3400U	2,4-DINITROPHENOL
1700U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE	3400U	4-NITROPHENOL
1700U	4-BROMOPHENYL PHENYL ETHER	1700U	2,3,4,6-TETRACHLOROPHENOL
1700U	HEXACHLOROBENZENE (HCB)	3400U	2-METHYL-4,6-DINITROPHENOL
1700U	PHENANTHRENE	3400U	PENTACHLOROPHENOL
1700U	ANTHRACENE	22	PERCENT MOISTURE
1700U	DI-N-BUTYLPHTHALATE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-02 SURFACE SOIL #02 COLLECTION START: 05/04/89 1020 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
16000U	BIS(2 CHLOROETHYL) ETHER
16000U	BIS(2-CHLOROISOPROPYL) ETHER
16000U	N-NITROSODI-N-PROPYLAMINE
16000U	HEXACHLOROETHANE
16000U	NITROBENZENE
16000U	ISOPHORONE
16000U	BIS(2-CHLOROETHOXY) METHANE
16000U	1,2,4-TRICHLOROBENZENE
16000U	NAPHTHALENE
16000U	4-CHLOROANILINE
16000U	HEXACHLOROBUTADIENE
16000U	2-METHYLNAPHTHALENE
16000U	HEXACHLOROCYCLOPENTADIENE (HCCP)
16000U	2-CHLORONAPHTHALENE
16000U	2-NITROANILINE
16000U	DIMETHYL PHTHALATE
2800J	ACENAPHTHYLENE
16000U	2,6-DINITROTOLUENE
16000U	3-NITROANILINE
16000U	ACENAPHTHENE
16000U	DIBENZOFURAN
16000U	2,4-DINITROTOLUENE
16000U	DIETHYL PHTHALATE
16000U	FLUORENE
16000U	4-CHLOROPHENYL PHENYL ETHER
16000U	4-NITROANILINE
16000U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
16000U	4-BROMOPHENYL PHENYL ETHER
16000U	HEXACHLOROBENZENE (HCB)
16000	PHENANTHRENE
5200J	ANTHRACENE
16000U	DI-N-BUTYLPHTHALATE

UG/KG	ANALYTICAL RESULTS
78000	FLUORANTHENE
67000	PYRENE
16000U	BENZYL BUTYL PHTHALATE
16000U	3,3'-DICHLOROBENZIDINE
28000	BENZO(A)ANTHRACENE
25000	CHRYSENE
16000U	BIS(2-ETHYLHEXYL) PHTHALATE
16000U	DI-N-OCTYLPHTHALATE
51000	BENZO(B AND/OR K)FLUORANTHENE
24000	BENZO-A-PYRENE
10000J	INDENO (1,2,3-CD) PYRENE
3700J	DIBENZO(A,H)ANTHRACENE
9500J	BENZO(GHI)PERYLENE
16000U	PHENOL
16000U	2-CHLOROPHENOL
31000U	BENZYL ALCOHOL
16000U	2-METHYLPHENOL
16000U	(3-AND/OR 4-)METHYLPHENOL
16000U	2-NITROPHENOL
16000U	2,4-DIMETHYLPHENOL
31000U	BENZOIC ACID
16000U	2,4-DICHLOROPHENOL
16000U	4-CHLORO-3-METHYLPHENOL
16000U	2,4,6-TRICHLOROPHENOL
16000U	2,4,5-TRICHLOROPHENOL
31000U	2,4-DINITROPHENOL
31000U	4-NITROPHENOL
16000U	2,3,4,6-TETRACHLOROPHENOL
31000U	2-METHYL-4,6-DINITROPHENOL
31000U	PENTACHLOROPHENOL
14	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400   SAMPLE NO. 34901   SAMPLE TYPE: SOIL   PROG ELEM: NSF   COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT.   CITY: ATHENS   ST: GA
STATION ID: SS-03 SURFACE SOIL #03   COLLECTION START: 05/04/89 1035   STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
20000U	BIS(2 CHLOROETHYL) ETHER
20000U	BIS(2-CHLOROISOPROPYL) ETHER
20000U	N-NITROSODI-N-PROPYLAMINE
20000U	HEXACHLOROETHANE
20000U	NITROBENZENE
20000U	ISOPHORONE
20000U	BIS(2-CHLOROETHOXY) METHANE
20000U	1,2,4-TRICHLOROBENZENE
20000U	NAPHTHALENE
20000U	4-CHLOROANILINE
20000U	HEXACHLOROBUTADIENE
20000U	2-METHYLNAPHTHALENE
20000U	HEXACHLOROCYCLOPENTADIENE (HCCP)
20000U	2-CHLORONAPHTHALENE
20000U	2-NITROANILINE
20000U	DIMETHYL PHTHALATE
20000U	ACENAPHTHYLENE
20000U	2,6-DINITROTOLUENE
20000U	3-NITROANILINE
20000U	ACENAPHTHENE
20000U	DIBENZOFURAN
20000U	2,4-DINITROTOLUENE
20000U	DIETHYL PHTHALATE
20000U	FLUORENE
20000U	4-CHLOROPHENYL PHENYL ETHER
20000U	4-NITROANILINE
20000U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20000U	4-BROMOPHENYL PHENYL ETHER
20000U	HEXACHLOROBENZENE (HCB)
20000U	PHENANTHRENE
20000U	ANTHRACENE
20000U	DI-N-BUTYLPHTHALATE

UG/KG	ANALYTICAL RESULTS
20000U	FLUORANTHENE
20000U	PYRENE
20000U	BENZYL BUTYL PHTHALATE
20000U	3,3'-DICHLOROBENZIDINE
20000U	BENZO(A)ANTHRACENE
20000U	CHRYSENE
20000U	BIS(2-ETHYLHEXYL) PHTHALATE
20000U	DI-N-OCTYLPHTHALATE
20000U	BENZO(B AND/OR K)FLUORANTHENE
20000U	BENZO-A-PYRENE
20000U	INDENO (1,2,3-CD) PYRENE
20000U	DIBENZO(A,H)ANTHRACENE
20000U	BENZO(GHI)PERYLENE
20000U	PHENOL
20000U	2-CHLOROPHENOL
40000U	BENZYL ALCOHOL
20000U	2-METHYLPHENOL
20000U	(3-AND/OR 4-)METHYLPHENOL
20000U	2-NITROPHENOL
20000U	2,4-DIMETHYLPHENOL
40000U	BENZOIC ACID
20000U	2,4-DICHLOROPHENOL
20000U	4-CHLORO-3-METHYLPHENOL
20000U	2,4,6-TRICHLOROPHENOL
20000U	2,4,5-TRICHLOROPHENOL
40000U	2,4-DINITROPHENOL
40000U	4-NITROPHENOL
20000U	2,3,4,6-TETRACHLOROPHENOL
40000U	2-METHYL-4,6-DINITROPHENOL
40000U	PENTACHLOROPHENOL
33	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-04 SURFACE SOIL #04 COLLECTION START: 05/04/89 1120 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
88000U	BIS(2 CHLOROETHYL) ETHER	88000U	FLUORANTHENE
88000U	BIS(2-CHLOROISOPROPYL) ETHER	88000U	PYRENE
88000U	N-NITROSODI-N-PROPYLAMINE	88000U	BENZYL BUTYL PHTHALATE
88000U	HEXACHLOROETHANE	88000U	3,3'-DICHLOROBENZIDINE
88000U	NITROBENZENE	88000U	BENZO(A)ANTHRACENE
88000U	ISOPHORONE	88000U	CHRYSENE
88000U	BIS(2-CHLOROETHOXY) METHANE	88000U	BIS(2-ETHYLHEXYL) PHTHALATE
88000U	1,2,4-TRICHLOROBENZENE	88000U	DI-N-OCTYLPHTHALATE
620000	NAPHTHALENE	88000U	BENZO(B AND/OR K)FLUORANTHENE
88000U	4-CHLOROANILINE	88000U	BENZO-A-PYRENE
88000U	HEXACHLOROBUTADIENE	88000U	INDENO (1,2,3-CD) PYRENE
240000	2-METHYLNAPHTHALENE	88000U	DIBENZO(A,H)ANTHRACENE
88000U	HEXACHLOROCYCLOPENTADIENE (HCCP)	88000U	BENZO(GHI)PERYLENE
88000U	2-CHLORONAPHTHALENE	88000U	PHENOL
88000U	2-NITROANILINE	88000U	2-CHLOROPHENOL
88000U	DIMETHYL PHTHALATE	180000U	BENZYL ALCOHOL
88000U	ACENAPHTHYLENE	88000U	2-METHYLPHENOL
88000U	2,6-DINITROTOLUENE	88000U	(3-AND/OR 4-)METHYLPHENOL
88000U	3-NITROANILINE	88000U	2-NITROPHENOL
88000U	ACENAPHTHENE	88000U	2,4-DIMETHYLPHENOL
88000U	DIBENZOFURAN	180000U	BENZOIC ACID
88000U	2,4-DINITROTOLUENE	88000U	2,4-DICHLOROPHENOL
88000U	DIETHYL PHTHALATE	88000U	4-CHLORO-3-METHYLPHENOL
88000U	FLUORENE	88000U	2,4,6-TRICHLOROPHENOL
88000U	4-CHLOROPHENYL PHENYL ETHER	88000U	2,4,5-TRICHLOROPHENOL
88000U	4-NITROANILINE	180000	2,4-DINITROPHENOL
88000U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE	180000	4-NITROPHENOL
88000U	4-BROMOPHENYL PHENYL ETHER	88000U	2,3,4,6-TETRACHLOROPHENOL
88000U	HEXACHLOROBENZENE (HCB)	180000U	2-METHYL-4,6-DINITROPHENOL
13000J	PHENANTHRENE	180000U	PENTACHLOROPHENOL
88000U	ANTHRACENE	40	PERCENT MOISTURE
88000U	DI-N-BUTYLPHTHALATE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-03 SUBSURFACE SOIL #03

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1225 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
1700U	BIS(2 CHLOROETHYL) ETHER
1700U	BIS(2-CHLOROISOPROPYL) ETHER
1700U	N-NITROSODI-N-PROPYLAMINE
1700U	HEXACHLOROETHANE
1700U	NITROBENZENE
1700U	ISOPHORONE
1700U	BIS(2-CHLOROETHOXY) METHANE
1700U	1,2,4-TRICHLOROBENZENE
1700U	NAPHTHALENE
1700U	4-CHLOROANILINE
1700U	HEXACHLOROBUTADIENE
1700U	2-METHYLNAPHTHALENE
1700U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1700U	2-CHLORONAPHTHALENE
1700U	2-NITROANILINE
1700U	DIMETHYL PHTHALATE
1700U	ACENAPHTHYLENE
1700U	2,6-DINITROTOLUENE
1700U	3-NITROANILINE
1700U	ACENAPHTHENE
1700U	DIBENZOFURAN
1700U	2,4-DINITROTOLUENE
1700U	DIETHYL PHTHALATE
1700U	FLUORENE
1700U	4-CHLOROPHENYL PHENYL ETHER
1700U	4-NITROANILINE
1700U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1700U	4-BROMOPHENYL PHENYL ETHER
1700U	HEXACHLOROBENZENE (HCB)
1700U	PHENANTHRENE
1700U	ANTHRACENE
1700U	DI-N-BUTYLPHTHALATE

UG/KG	ANALYTICAL RESULTS
1700U	FLUORANTHENE
1700U	PYRENE
1700U	BENZYL BUTYL PHTHALATE
1700U	3,3'-DICHLOROBENZIDINE
1700U	BENZO(A)ANTHRACENE
1700U	CHRYSENE
1700U	BIS(2-ETHYLHEXYL) PHTHALATE
1700U	DI-N-OCTYLPHTHALATE
1700U	BENZO(B AND/OR K)FLUORANTHENE
1700U	BENZO-A-PYRENE
1700U	INDENO (1,2,3-CD) PYRENE
1700U	DIBENZO(A,H)ANTHRACENE
1700U	BENZO(GHI)PERYLENE
1700U	PHENOL
1700U	2-CHLOROPHENOL
3300U	BENZYL ALCOHOL
1700U	2-METHYLPHENOL
1700U	(3-AND/OR 4-)METHYLPHENOL
1700U	2-NITROPHENOL
1700U	2,4-DIMETHYLPHENOL
3300U	BENZOIC ACID
1700U	2,4-DICHLOROPHENOL
1700U	4-CHLORO-3-METHYLPHENOL
1700U	2,4,6-TRICHLOROPHENOL
1700U	2,4,5-TRICHLOROPHENOL
3300U	2,4-DINITROPHENOL
3300U	4-NITROPHENOL
1700U	2,3,4,6-TETRACHLOROPHENOL
3300U	2-METHYL-4,6-DINITROPHENOL
3300U	PENTACHLOROPHENOL
19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-01 BACKGROUND SURFACE SOIL COLLECTION START: 05/03/89 1530 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
1700U	BIS(2 CHLOROETHYL) ETHER	1700U	FLUORANTHENE
1700U	BIS(2-CHLOROISOPROPYL) ETHER	1700U	PYRENE
1700U	N-NITROSODI-N-PROPYLAMINE	1700U	BENZYL BUTYL PHTHALATE
1700U	HEXACHLOROETHANE	1700U	3,3'-DICHLOROBENZIDINE
1700U	NITROBENZENE	1700U	BENZO(A)ANTHRACENE
1700U	ISOPHORONE	1700U	CHRYSENE
1700U	BIS(2-CHLOROETHOXY) METHANE	1700U	BIS(2-ETHYLHEXYL) PHTHALATE
1700U	1,2,4-TRICHLOROBENZENE	1700U	DI-N-OCTYLPHTHALATE
1700U	NAPHTHALENE	1700U	BENZO(B AND/OR K)FLUORANTHENE
1700U	4-CHLOROANILINE	1700U	BENZO-A-PYRENE
1700U	HEXACHLOROBUTADIENE	1700U	INDENO (1,2,3-CD) PYRENE
1700U	2-METHYLNAPHTHALENE	1700U	DIBENZO(A,H)ANTHRACENE
1700U	HEXACHLOROCYCLOPENTADIENE (HCCP)	1700U	BENZO(GHI)PERYLENE
1700U	2-CHLORONAPHTHALENE	1700U	PHENOL
1700U	2-NITROANILINE	1700U	2-CHLOROPHENOL
1700U	DIMETHYL PHTHALATE	3300U	BENZYL ALCOHOL
1700U	ACENAPHTHYLENE	1700U	2-METHYLPHENOL
1700U	2,6-DINITROTOLUENE	1700U	(3-AND/OR 4-)METHYLPHENOL
1700U	3-NITROANILINE	1700U	2-NITROPHENOL
1700U	ACENAPHTHENE	1700U	2,4-DIMETHYLPHENOL
1700U	DIBENZOFURAN	3300U	BENZOIC ACID
1700U	2,4-DINITROTOLUENE	1700U	2,4-DICHLOROPHENOL
1700U	DIETHYL PHTHALATE	1700U	4-CHLORO-3-METHYLPHENOL
1700U	FLUORENE	1700U	2,4,6-TRICHLOROPHENOL
1700U	4-CHLOROPHENYL PHENYL ETHER	1700U	2,4,5-TRICHLOROPHENOL
1700U	4-NITROANILINE	3300U	2,4-DINITROPHENOL
1700U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE	3300U	4-NITROPHENOL
1700U	4-BROMOPHENYL PHENYL ETHER	1700U	2,3,4,6-TETRACHLOROPHENOL
1700U	HEXACHLOROBENZENE (HCB)	3300U	2-METHYL-4,6-DINITROPHENOL
1700U	PHENANTHRENE	3300U	PENTACHLOROPHENOL
1700U	ANTHRACENE	19	PERCENT MOISTURE
1700U	DI-N-BUTYLPHTHALATE		

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1550 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
1700U	BIS(2 CHLOROETHYL) ETHER
1700U	BIS(2-CHLOROISOPROPYL) ETHER
1700U	N-NITROSODI-N-PROPYLAMINE
1700U	HEXACHLOROETHANE
1700U	NITROBENZENE
1700U	ISOPHORONE
1700U	BIS(2-CHLOROETHOXY) METHANE
1700U	1,2,4-TRICHLOROBENZENE
1700U	NAPHTHALENE
1700U	4-CHLOROANILINE
1700U	HEXACHLOROBUTADIENE
1700U	2-METHYLNAPHTHALENE
1700U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1700U	2-CHLORONAPHTHALENE
1700U	2-NITROANILINE
1700U	DIMETHYL PHTHALATE
1700U	ACENAPHTHYLENE
1700U	2,6-DINITROTOLUENE
1700U	3-NITROANILINE
1700U	ACENAPHTHENE
1700U	DIBENZOFURAN
1700U	2,4-DINITROTOLUENE
1700U	DIETHYL PHTHALATE
1700U	FLUORENE
1700U	4-CHLOROPHENYL PHENYL ETHER
1700U	4-NITROANILINE
1700U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1700U	4-BROMOPHENYL PHENYL ETHER
1700U	HEXACHLOROBENZENE (HCB)
1700U	PHENANTHRENE
1700U	ANTHRACENE
1700U	DI-N-BUTYLPHTHALATE

UG/KG	ANALYTICAL RESULTS
1700U	FLUORANTHENE
1700U	PYRENE
1700U	BENZYL BUTYL PHTHALATE
1700U	3,3'-DICHLOROBENZIDINE
1700U	BENZO(A)ANTHRACENE
1700U	CHRYSENE
1700U	BIS(2-ETHYLHEXYL) PHTHALATE
1700U	DI-N-OCTYLPHTHALATE
1700U	BENZO(B AND/OR K)FLUORANTHENE
1700U	BENZO-A-PYRENE
1700U	INDENO (1,2,3-CD) PYRENE
1700U	DIBENZO(A,H)ANTHRACENE
1700U	BENZO(GHI)PERYLENE
1700U	PHENOL
1700U	2-CHLOROPHENOL
3300U	BENZYL ALCOHOL
1700U	2-METHYLPHENOL
1700U	(3-AND/OR 4-)METHYLPHENOL
1700U	2-NITROPHENOL
1700U	2,4-DIMETHYLPHENOL
3300U	BENZOIC ACID
1700U	2,4-DICHLOROPHENOL
1700U	4-CHLORO-3-METHYLPHENOL
1700U	2,4,6-TRICHLOROPHENOL
1700U	2,4,5-TRICHLOROPHENOL
3300U	2,4-DINITROPHENOL
3300U	4-NITROPHENOL
1700U	2,3,4,6-TETRACHLOROPHENOL
3300U	2-METHYL-4,6-DINITROPHENOL
3300U	PENTACHLOROPHENOL
21	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SD-01 BACKGROUND SEDIMENT SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1630 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
2000UJ	BIS(2-CHLOROETHYL) ETHER
2000UJ	BIS(2-CHLOROISOPROPYL) ETHER
2000UJ	N-NITROSODI-N-PROPYLAMINE
2000UJ	HEXACHLOROETHANE
2000UJ	NITROBENZENE
2000UJ	ISOPHORONE
2000UJ	BIS(2-CHLOROETHOXY) METHANE
2000UJ	1,2,4-TRICHLOROBENZENE
2000UJ	NAPHTHALENE
2000UJ	4-CHLOROANILINE
2000UJ	HEXACHLOROBUTADIENE
2000UJ	2-METHYLNAPHTHALENE
2000UJ	HEXACHLOROCYCLOPENTADIENE (HCCP)
2000UJ	2-CHLORONAPHTHALENE
2000UJ	2-NITROANILINE
2000UJ	DIMETHYL PHTHALATE
2000UJ	ACENAPHTHYLENE
2000UJ	2,6-DINITROTOLUENE
2000UJ	3-NITROANILINE
2000UJ	ACENAPHTHENE
2000UJ	DIBENZOFURAN
2000UJ	2,4-DINITROTOLUENE
2000UJ	DIETHYL PHTHALATE
2000UJ	FLUORENE
2000UJ	4-CHLOROPHENYL PHENYL ETHER
2000UJ	4-NITROANILINE
2000UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
2000UJ	4-BROMOPHENYL PHENYL ETHER
2000UJ	HEXACHLOROBENZENE (HCB)
2000UJ	PHENANTHRENE
2000UJ	ANTHRACENE
2000UJ	DI-N-BUTYLPHTHALATE

UG/KG	ANALYTICAL RESULTS
2000UJ	FLUORANTHENE
2000UJ	PYRENE
2000UJ	BENZYL BUTYL PHTHALATE
2000UJ	3,3'-DICHLOROBENZIDINE
2000UJ	BENZO(A)ANTHRACENE
2000UJ	CHRYSENE
2000UJ	BIS(2-ETHYLHEXYL) PHTHALATE
2000UJ	DI-N-OCTYLPHTHALATE
2000UJ	BENZO(B AND/OR K)FLUORANTHENE
2000UJ	BENZO-A-PYRENE
2000UJ	INDENO (1,2,3-CD) PYRENE
2000UJ	DIBENZO(A,H)ANTHRACENE
2000UJ	BENZO(GHI)PERYLENE
2000UJ	PHENOL
2000UJ	2-CHLOROPHENOL
4000UJ	BENZYL ALCOHOL
2000UJ	2-METHYLPHENOL
2000UJ	(3-AND/OR 4-)METHYLPHENOL
2000UJ	2-NITROPHENOL
2000UJ	2,4-DIMETHYLPHENOL
4000UJ	BENZOIC ACID
2000UJ	2,4-DICHLOROPHENOL
2000UJ	4-CHLORO-3-METHYLPHENOL
2000UJ	2,4,6-TRICHLOROPHENOL
2000UJ	2,4,5-TRICHLOROPHENOL
4000UJ	2,4-DINITROPHENOL
4000UJ	4-NITROPHENOL
2000UJ	2,3,4,6-TETRACHLOROPHENOL
4000UJ	2-METHYL-4,6-DINITROPHENOL
4000UJ	PENTACHLOROPHENOL
33	PERCENT MOISTURE

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SD-02 SEDIMENT SOIL #02 COLLECTION START: 05/03/89 1815 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
2500U	BIS(2 CHLOROETHYL) ETHER	2500U	FLUORANTHENE
2500U	BIS(2-CHLOROISOPROPYL) ETHER	2500U	PYRENE
2500U	N-NITROSODI-N-PROPYLAMINE	2500U	BENZYL BUTYL PHTHALATE
2500U	HEXACHLOROETHANE	2500U	3,3'-DICHLOROBENZIDINE
2500U	NITROBENZENE	2500U	BENZO(A)ANTHRACENE
2500U	ISOPHORONE	2500U	CHRYSENE
2500U	BIS(2-CHLOROETHOXY) METHANE	2500U	BIS(2-ETHYLHEXYL) PHTHALATE
2500U	1,2,4-TRICHLOROBENZENE	2500U	DI-N-OCTYLPHTHALATE
2500U	NAPHTHALENE	2500U	BENZO(B AND/OR K)FLUORANTHENE
2500U	4-CHLOROANILINE	2500U	BENZO-A-PYRENE
2500U	HEXACHLOROBUTADIENE	2500U	INDENO (1,2,3-CD) PYRENE
2500U	2-METHYLNAPHTHALENE	2500U	DIBENZO(A,H)ANTHRACENE
2500U	HEXACHLOROCYCLOPENTADIENE (HCCP)	2500U	BENZO(GHI)PERYLENE
2500U	2-CHLORONAPHTHALENE	2500U	PHENOL
2500U	2-NITROANILINE	2500U	2-CHLOROPHENOL
2500U	DIMETHYL PHTHALATE	5000U	BENZYL ALCOHOL
2500U	ACENAPHTHYLENE	2500U	2-METHYLPHENOL
2500U	2,6-DINITROTOLUENE	2500U	(3-AND/OR 4-)METHYLPHENOL
2500U	3-NITROANILINE	2500U	2-NITROPHENOL
2500U	ACENAPHTHENE	2500U	2,4-DIMETHYLPHENOL
2500U	DIBENZOFURAN	5000U	BENZOIC ACID
2500U	2,4-DINITROTOLUENE	2500U	2,4-DICHLOROPHENOL
2500U	DIETHYL PHTHALATE	2500U	4-CHLORO-3-METHYLPHENOL
2500U	FLUORENE	2500U	2,4,6-TRICHLOROPHENOL
2500U	4-CHLOROPHENYL PHENYL ETHER	2500U	2,4,5-TRICHLOROPHENOL
2500U	4-NITROANILINE	5000U	2,4-DINITROPHENOL
2500U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE	5000U	4-NITROPHENOL
2500U	4-BROMOPHENYL PHENYL ETHER	2500U	2,3,4,6-TETRACHLOROPHENOL
2500U	HEXACHLOROBENZENE (HCB)	5000U	2-METHYL-4,6-DINITROPHENOL
2500U	PHENANTHRENE	5000U	PENTACHLOROPHENOL
2500U	ANTHRACENE	48	PERCENT MOISTURE
2500U	DI-N-BUTYLPHTHALATE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-02 SURFACE SOIL #02

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1020 STOP: 00/00/00

ANALYTICAL RESULTS UG/KG

2000JN	(DIMETHYLBUTENYLIDENE)BISBENZENE
2000JN	METHYLPHENANTHRENE
6000JN	CYCLOPENTAPHENANTHRENE
3000JN	PHENYLNAPHTHALENE
2000JN	BIS(BUTADIYNEDIYL)BENZENE
9000JN	BENZONAPHTHOFURAN (3 ISOMERS)
3000JN	PHENANTHRENECARBONITRILE
20000JN	METHYLFLUORANTHENE (4 ISOMERS)
8000JN	BENZOFLUORENE
7000JN	BENZONAPHTHOTHIOPHENE
40000JN	BENZOFLUORANTHENE (NOT B OR K) (2 ISOMERS)
200000J	2 UNIDENTIFIED COMPOUNDS
2000JN	BENZOPHENANTHRENONE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA. 06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SS-03 SURFACE SOIL #03 COLLECTION START: 05/04/89 1035 STOP: 00/00/00 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

5000JN	METHYLPROPYLBENZENE
9000JN	DIETHYLMETHYLBENZENE (2 ISOMERS)
6000JN	(DIMETHYLPROPYL)BENZENE
10000JN	DIMETHYL(METHYLETHYL)BENZENE (2 ISOMERS)
4000JN	ETHYLTRIMETHYLBENZENE
6000JN	HEXANOIC ACID
3000JN	COPAENE
40000JN	HEPTADECANOL (2 ISOMERS)
200000JN	TETRADECANOIC ACID
40000JN	PENTADECANOIC ACID
40000JN	TETRADECANAL
2E6JN	HEXADECANOIC ACID
2E6J	11 UNIDENTIFIED COMPOUNDS
100000JN	HEPTADECANOIC ACID
700000JN	OCTADECANOIC ACID
N	PETROLEUM PRODUCT
40000JN	ETHYLDIMETHYLBENZENE (5 ISOMERS)

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SS-04 SURFACE SOIL #04 COLLECTION START: 05/04/89 1120 STOP: 00/00/00 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

10000JN	PROPYLCYCLOHEXANE
30000JN	PROPYLBENZENE
200000JN	ETHYLMETHYLBENZENE (3 ISOMERS)
900000JN	TRIMETHYLBENZENE (3 ISOMERS)
N	PETROLEUM PRODUCT
20000JN	(METHYLPROPYL)BENZENE
200000JN	PROPENYLCYCLOHEXANE
100000JN	DIHYDROINDENE
900000JN	METHYLPROPYLBENZENE
600000JN	BUTYLBENZENE
6E6JN	ETHYLDIMETHYLBENZENE (7 ISOMERS)
1E6JN	(DIMETHYLPROPYL)BENZENE (6 ISOMERS)
100000JN	DIETHYLMETHYLBENZENE
20000JN	METHYLDECAHYDRONAPHTHALENE
30000JN	PENTYLCYCLOHEXANE
700000JN	METHYLDIHYDROINDENE
1E6JN	DIMETHYL(METHYLETHYL)BENZENE (6 ISOMERS)
1E6JN	DIETHYLBENZENE
2E6J	10 UNIDENTIFIED COMPOUNDS
200000JN	TETRAHYDRONAPHTHALENE
100000JN	[(METHYLBENZYL)SULFONYL]PHENOL
200000JN	DIMETHYLDIHYDROINDENE (2 ISOMERS)
90000JN	DIMETHYL(METHYLPROPYL)BENZENE (2 ISOMERS)
100000JN	ETHYLTRIMETHYLBENZENE
60000JN	1-METHYLNAPHTHALENE
20000JN	DIMETHYLNAPHTHALENE
100000JN	HEXAMETHYLOCTAHYDROINDENE
100000JN	BIS(DIMETHYLETHYL)METHYLPHENOL
20000JN	TRIMETHYLNAPATHALENE (2 ISOMERS)
30000JN	METHYL(METHYLETHYL)NAPHTHALENE
200000JN	TETRADECANOIC ACID
30000JN	DIMETHYLPHENANTHRENE
1E5JN	HEXADECENOIC ACID
4E6JN	HEXADECANOIC ACID
1E6JN	OCTADECANOIC ACID
2E6JN	ETHYL(METHYLETHYL)BENZENE
50000JN	METHYLPROPYLCYCLOHEXANE (2 ISOMERS)

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 89-400   SAMPLE NO. 34903   SAMPLE TYPE: SOIL   PROG ELEM: NSF   COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT.   CITY: ATHENS   ST: GA
STATION ID: SB-03 SUBSURFACE SOIL #03   COLLECTION START: 05/04/89 1225   STOP: 00/00/00

ANALYTICAL RESULTS UG/KG

200JN	TETRADECANOIC ACID
5000JN	HEXADECANOIC ACID
700JN	OCTADECANOIC ACID

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.
06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SS-01 BACKGROUND SURFACE SOIL COLLECTION START: 05/03/89 1530 STOP: 00/00/00 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

1000JN	HEXADECANOIC ACID

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA. 06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 89-400    SAMPLE NO. 34905  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R YOUNG                  **
**   SOURCE: WESTINGHOUSE ELECT.                                       CITY: ATHENS                 ST: GA                      **
**   STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL                      COLLECTION START: 05/03/89  1550   STOP: 00/00/00        **
**                                                                                                                              **
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ANALYTICAL RESULTS UG/KG

5000JN	HEXADECANOIC ACID
400JN	OCTADECANOIC ACID

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 89-400   SAMPLE NO. 34906  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R YOUNG                       **
**   SOURCE: WESTINGHOUSE ELECT.                                     CITY: ATHENS                ST: GA                          **
**   STATION ID: SD-01 BACKGROUND SEDIMENT SOIL                      COLLECTION START: 05/03/89  1630   STOP: 00/00/00           **
**                                                                                                                               **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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ANALYTICAL RESULTS UG/KG

2000JN	HEXADECANOIC ACID

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SD-02 SEDIMENT SOIL #02 COLLECTION START: 05/03/89 1815 STOP: 00/00/00 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

6000JN	HEXADECANOIC ACID
700JN	OCTADECANOIC ACID
N	PETROLEUM PRODUCT

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV
COLLEGE STATION RD.
ATHENS, GA. 30613

SISB/SAS
RECEIVED
JUN 19 1989
EPA - REGION IV
ATLANTA, GA

*****MEMORANDUM******

DATE: 06/10/89

SUBJECT: Results of Metals Analysis;
89-400 WESTINGHOUSE ELECT.
ATHENS GA

FROM: William H. McDaniel
Chief, Inorganic Chemistry Section

TO: PHIL BLACKWELL

Attached are the results of analysis of samples collected as part of the subject project.

If you have any questions please contact me.

ATTACHMENT

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/09/89

METALS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34899 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-02 SUBSURFACE SOIL #2 COLLECTION START: 05/04/89 1005 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
7.0U	SILVER
21U	ARSENIC
NA	BORON
90	BARIUM
3.5U	BERYLLIUM
3.5U	CADMIUM
7.0U	COBALT
34	CHROMIUM
22	COPPER
7.0U	MOLYBDENUM
14U	NICKEL
42	LEAD
21U	ANTIMONY
28U	SELENIUM
18U	TIN
7.0U	STRONTIUM
35U	TELLURIUM
1900	TITANIUM
70U	THALLIUM
150	VANADIUM
7.0U	YTTRIUM
31	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
55000	ALUMINUM
310	MANGANESE

MG/KG	ANALYTICAL RESULTS
580	CALCIUM
2100	MAGNESIUM
53000	IRON
700U	SODIUM
2500	POTASSIUM
21	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/09/89

METALS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-02 SURFACE SOIL #02 COLLECTION START: 05/04/89 1020 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
2.0U	SILVER
6.0U	ARSENIC
NA	BORON
92	BARIUM
1.0U	BERYLLIUM
1.0U	CADMIUM
5.9	COBALT
28	CHROMIUM
51	COPPER
2.0U	MOLYBDENUM
6.0	NICKEL
140	LEAD
6.0U	ANTIMONY
8.0U	SELENIUM
5.0U	TIN
8.2	STRONTIUM
10U	TELLURIUM
710	TITANIUM
20U	THALLIUM
43	VANADIUM
13	YTTRIUM
100	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
19000	ALUMINUM
320	MANGANESE

MG/KG	ANALYTICAL RESULTS
2200	CALCIUM
1900	MAGNESIUM
14000	IRON
200U	SODIUM
1800	POTASSIUM
13	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.
06/09/89

METALS DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SS-03 SURFACE SOIL #03 COLLECTION START: 05/04/89 1035 STOP: 00/00/00 **
** **
*** ***

MG/KG	ANALYTICAL RESULTS
50U	SILVER
150U	ARSENIC
NA	BORON
130	BARIUM
25U	BERYLLIUM
25U	CADMIUM
50U	COBALT
2400	CHROMIUM
23000	COPPER
50U	MOLYBDENUM
100U	NICKEL
10000	LEAD
150U	ANTIMONY
200U	SELENIUM
120U	TIN
50U	STRONTIUM
250U	TELLURIUM
1100	TITANIUM
500U	THALLIUM
70	VANADIUM
50U	YTTRIUM
3000	ZINC
NA	ZIRCONIUM
0.05	MERCURY
28000	ALUMINUM
500	MANGANESE

MG/KG	ANALYTICAL RESULTS
2500U	CALCIUM
3500	MAGNESIUM
29000	IRON
5000U	SODIUM
10000U	POTASSIUM
33	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SS-04 SURFACE SOIL #04 COLLECTION START: 05/04/89 1120 STOP: 00/00/00 **
** **
*** ***

MG/KG	ANALYTICAL RESULTS
25U	SILVER
75U	ARSENIC
NA	BORON
9000	BARIUM
12U	BERYLLIUM
12U	CADMIUM
55	COBALT
8700	CHROMIUM
9900	COPPER
25U	MOLYBDENUM
58	NICKEL
9000	LEAD
100	ANTIMONY
100U	SELENIUM
62U	TIN
120	STRONTIUM
120U	TELLURIUM
170	TITANIUM
250U	THALLIUM
46	VANADIUM
25U	YTTRIUM
10000	ZINC
NA	ZIRCONIUM
0.10	MERCURY
18000	ALUMINUM
210	MANGANESE

MG/KG	ANALYTICAL RESULTS
1800	CALCIUM
1000	MAGNESIUM
29000	IRON
2500U	SODIUM
5000U	POTASSIUM
29	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/09/89

METALS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-03 SUBSURFACE SOIL #03 COLLECTION START: 05/04/89 1225 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
5.0U	SILVER
15U	ARSENIC
NA	BORON
60	BARIUM
2.5U	BERYLLIUM
2.5U	CADMIUM
15	COBALT
56	CHROMIUM
13	COPPER
5.0U	MOLYBDENUM
11	NICKEL
21	LEAD
15U	ANTIMONY
20U	SELENIUM
12U	TIN
5.0U	STRONTIUM
25U	TELLURIUM
1200	TITANIUM
50U	THALLIUM
81	VANADIUM
5.0U	YTTRIUM
40	ZINC
NA	ZIRCONIUM
0.1	MERCURY
50000	ALUMINUM
1300	MANGANESE

MG/KG	ANALYTICAL RESULTS
290	CALCIUM
1200	MAGNESIUM
34000	IRON
500U	SODIUM
1200	POTASSIUM
19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/09/89

METALS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL
PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT.
CITY: ATHENS ST: GA
STATION ID: SS-01 BACKGROUND SURFACE SOIL
COLLECTION START: 05/03/89 1530 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
3.0U	SILVER
9.0U	ARSENIC
NA	BORON
160	BARIUM
1.5U	BERYLLIUM
1.5U	CADMIUM
15	COBALT
14	CHROMIUM
7.5	COPPER
3.0U	MOLYBDENUM
6.0U	NICKEL
25	LEAD
9.0U	ANTIMONY
12U	SELENIUM
7.5U	TIN
3.0U	STRONTIUM
15U	TELLURIUM
1800	TITANIUM
30U	THALLIUM
61	VANADIUM
14	YTTRIUM
53	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
30000	ALUMINUM
800	MANGANESE

MG/KG	ANALYTICAL RESULTS
150U	CALCIUM
8300	MAGNESIUM
26000	IRON
300U	SODIUM
7800	POTASSIUM
19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL COLLECTION START: 05/03/89 1550 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
5.0U	SILVER
15U	ARSENIC
NA	BORON
26	BARIUM
2.5U	BERYLLIUM
2.5U	CADMIUM
5.0U	COBALT
29	CHROMIUM
34	COPPER
5.0U	MOLYBDENUM
14	NICKEL
29	LEAD
15U	ANTIMONY
20U	SELENIUM
12U	TIN
5.0U	STRONTIUM
25U	TELLURIUM
940	TITANIUM
50U	THALLIUM
120	VANADIUM
9.7	YTTRIUM
26	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
27000	ALUMINUM
250	MANGANESE

MG/KG	ANALYTICAL RESULTS
250U	CALCIUM
1100	MAGNESIUM
45000	IRON
500U	SODIUM
1100	POTASSIUM
22	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SD-01 BACKGROUND SEDIMENT SOIL COLLECTION START: 05/03/89 1630 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
2.0U	SILVER
6.0U	ARSENIC
NA	BORON
21	BARIUM
1.0U	BERYLLIUM
1.0U	CADMIUM
2.0U	COBALT
15	CHROMIUM
3.9	COPPER
2.0U	MOLYBDENUM
4.0U	NICKEL
6.3	LEAD
6.0U	ANTIMONY
8.0U	SELENIUM
5.0U	TIN
2.0U	STRONTIUM
10U	TELLURIUM
410	TITANIUM
20U	THALLIUM
42	VANADIUM
7.1	YTTRIUM
12	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
4400	ALUMINUM
150	MANGANESE

MG/KG	ANALYTICAL RESULTS
150	CALCIUM
710	MAGNESIUM
16000	IRON
200U	SODIUM
820	POTASSIUM
20	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/09/89

METALS DATA REPORT

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** PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SD-02 SEDIMENT SOIL #02 COLLECTION START: 05/03/89 1815 STOP: 00/00/00 **
** **

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MG/KG	ANALYTICAL RESULTS
6.0U	SILVER
18U	ARSENIC
NA	BORON
180	BARIUM
3.0U	BERYLLIUM
3.0U	CADMIUM
18	COBALT
47	CHROMIUM
30	COPPER
6.0U	MOLYBDENUM
12U	NICKEL
45	LEAD
18U	ANTIMONY
24U	SELENIUM
15U	TIN
12	STRONTIUM
30U	TELLURIUM
1000	TITANIUM
60U	THALLIUM
120	VANADIUM
25	YTTRIUM
57	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
46000	ALUMINUM
4500	MANGANESE

MG/KG	ANALYTICAL RESULTS
1200	CALCIUM
1900	MAGNESIUM
50000	IRON
600U	SODIUM
1400	POTASSIUM
45	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 89-400 , SAMPLE NO. 34903  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R YOUNG          **
**   SOURCE: WESTINGHOUSE ELECT.                                     CITY: ATHENS                ST: GA                 **
**   STATION ID: SB-03 SUBSURFACE SOIL #03                           COLLECTION START: 05/04/89  1225   STOP: 00/00/00  **
**                                                                                                                      **
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ANALYTICAL RESULTS UG/KG

200JN	TETRADECANOIC ACID
5000JN	HEXADECANOIC ACID
700JN	OCTADECANOIC ACID

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1550 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
8.1U	ALDRIN
27U	HEPTACHLOR
8.1U	HEPTACHLOR EPOXIDE
8.1U	ALPHA-BHC
8.1U	BETA-BHC
8.1U	GAMMA BHC (LINDANE)
8.1U	DELTA-BHC
8.1U	ENDOSULFAN I (ALPHA)
8.1U	DIELDRIN
8.1U	4,4'-DDT (P,P'-DDT)
8.1U	4,4'-DDE (P,P'-DDE)
8.1U	4,4'-DDD (P,P'-DDD)
8.1U	ENDRIN
8.1U	ENDOSULFAN II (BETA)
8.1U	ENDOSULFAN SULFATE
42U	CHLORDANE (TECH. MIXTURE) /1
62U	PCB-1242 (AROCLOR 1242)
62U	PCB-1254 (AROCLOR 1254)
62U	PCB-1221 (AROCLOR 1221)

UG/KG	ANALYTICAL RESULTS
62U	PCB-1232 (AROCLOR 1232)
62U	PCB-1248 (AROCLOR 1248)
62U	PCB-1260 (AROCLOR 1260)
62U	PCB-1016 (AROCLOR 1016)
310U	TOXAPHENE
---	CHLORDENE /2
---	ALPHA-CHLORDENE /2
---	BETA CHLORDENE /2
---	GAMMA-CHLORDENE /2
---	1-HYDROXYCHLORDENE /2
---	GAMMA-CHLORDANE /2
---	TRANS-NONACHLOR /2
---	ALPHA-CHLORDANE /2
---	CIS-NONACHLOR /2
---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
19U	METHOXYCHLOR
8.1U	ENDRIN KETONE
21	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

PROJECT NO. 89-400 SAMPLE NO. 34899 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-02 SUBSURFACE SOIL #2 COLLECTION START: 05/04/89 1005 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
8.1U	ALDRIN	62U	PCB-1232 (AROCLOR 1232)
8.1U	HEPTACHLOR	62U	PCB-1248 (AROCLOR 1248)
8.1U	HEPTACHLOR EPOXIDE	62U	PCB-1260 (AROCLOR 1260)
8.1U	ALPHA-BHC	62U	PCB-1016 (AROCLOR 1016)
8.1U	BETA-BHC	310U	TOXAPHENE
8.1U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
8.1U	DELTA-BHC	---	ALPHA-CHLORDENE /2
8.1U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
8.1U	DIELDRIN	---	GAMMA-CHLORDENE /2
8.1J	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
8.1U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
8.1U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
8.1U	ENDRIN	---	ALPHA-CHLORDANE /2
8.1U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
8.1U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
42U	CHLORDANE (TECH. MIXTURE) /1	19U	METHOXYCHLOR
62U	PCB-1242 (AROCLOR 1242)	8.1U	ENDRIN KETONE
62U	PCB-1254 (AROCLOR 1254)	22	PERCENT MOISTURE
62U	PCB-1221 (AROCLOR 1221)		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

PROJECT NO. 89-400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-03 SUBSURFACE SOIL #03

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1225 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
8.1U	ALDRIN	62U	PCB-1232 (AROCLOR 1232)
8.1U	HEPTACHLOR	62U	PCB-1248 (AROCLOR 1248)
8.1U	HEPTACHLOR EPOXIDE	62U	PCB-1260 (AROCLOR 1260)
8.1U	ALPHA-BHC	62U	PCB-1016 (AROCLOR 1016)
8.1U	BETA-BHC	310U	TOXAPHENE
8.1U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
8.1U	DELTA-BHC	---	ALPHA-CHLORDENE /2
8.1U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
8.1U	DIELDRIN	---	GAMMA-CHLORDENE /2
8.1U	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
8.1U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
8.1U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
8.1U	ENDRIN	---	ALPHA-CHLORDANE /2
8.1U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
8.1U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
42U	CHLORDANE (TECH. MIXTURE) /1	19U	METHOXYCHLOR
62U	PCB-1242 (AROCLOR 1242)	8.1U	ENDRIN KETONE
62U	PCB-1254 (AROCLOR 1254)	19	PERCENT MOISTURE
62U	PCB-1221 (AROCLOR 1221)		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 06/13/89

PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SD-01 BACKGROUND SEDIMENT SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1630 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
44U	CHLOROMETHANE
44U	VINYL CHLORIDE
44U	BROMOMETHANE
44U	CHLOROETHANE
44U	TRICHLOROFLUOROMETHANE
44U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
440U	ACETONE
440U	CARBON DISULFIDE
44U	METHYLENE CHLORIDE
44U	TRANS-1,2-DICHLOROETHENE
44U	1,1-DICHLOROETHANE
440U	VINYL ACETATE
44U	CIS-1,2-DICHLOROETHENE
44U	2,2-DICHLOROPROPANE
440U	METHYL ETHYL KETONE
44U	BROMOCHLOROMETHANE
44U	CHLOROFORM
44U	1,1,1-TRICHLOROETHANE
44U	1,1 DICHLOROPROPENE
44U	CARBON TETRACHLORIDE
44U	1,2-DICHLOROETHANE
44U	BENZENE
44U	TRICHLOROETHENE(TRICHLOROETHYLENE)
44U	1,2-DICHLOROPROPANE
44U	DIBROMOMETHANE
44U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
44U	CIS 1,3-DICHLOROPROPENE
440U	METHYL ISOBUTYL KETONE
44U	TOLUENE
44U	TRANS-1,3 DICHLOROPROPENE
44U	1,1,2-TRICHLOROETHANE
44U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
44U	1,3-DICHLOROPROPANE
440U	METHYL BUTYL KETONE
44U	DIBROMOCHLOROMETHANE
44U	CHLOROBENZENE
44U	1,1,1,2-TETRACHLOROETHANE
44U	ETHYL BENZENE
44U	(M- AND/OR P-)XYLENE
44U	O-XYLENE
44U	STYRENE
44U	BROMOFORM
44U	BROMOBENZENE
44U	1,1,2,2-TETRACHLOROETHANE
44U	1,2,3-TRICHLOROPROPANE
44U	O-CHLOROTOLUENE
44U	P-CHLOROTOLUENE
44U	1,3-DICHLOROBENZENE
44U	1,4-DICHLOROBENZENE
44U	1,2-DICHLOROBENZENE
33.0	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 06/13/89

PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SD-02 SEDIMENT SOIL #02 COLLECTION START: 05/03/89 1815 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
73U	CHLOROMETHANE	73U	CIS-1,3-DICHLOROPROPENE
73U	VINYL CHLORIDE	730U	METHYL ISOBUTYL KETONE
73U	BROMOMETHANE	73U	TOLUENE
73U	CHLOROETHANE	73U	TRANS-1,3-DICHLOROPROPENE
73U	TRICHLOROFLUOROMETHANE	73U	1,1,2-TRICHLOROETHANE
73U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	73U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
730U	ACETONE	73U	1,3-DICHLOROPROPANE
730U	CARBON DISULFIDE	730U	METHYL BUTYL KETONE
73U	METHYLENE CHLORIDE	73U	DIBROMOCHLOROMETHANE
73U	TRANS-1,2-DICHLOROETHENE	73U	CHLOROBENZENE
73U	1,1-DICHLOROETHANE	73U	1,1,1,2-TETRACHLOROETHANE
730U	VINYL ACETATE	73U	ETHYL BENZENE
73U	CIS-1,2-DICHLOROETHENE	73U	(M- AND/OR P-)XYLENE
73U	2,2-DICHLOROPROPANE	73U	O-XYLENE
730U	METHYL ETHYL KETONE	73U	STYRENE
73U	BROMOCHLOROMETHANE	73U	BROMOFORM
73U	CHLOROFORM	73U	BROMOBENZENE
73U	1,1,1-TRICHLOROETHANE	73U	1,1,2,2-TETRACHLOROETHANE
73U	1,1-DICHLOROPROPENE	73U	1,2,3-TRICHLOROPROPANE
73U	CARBON TETRACHLORIDE	73U	O-CHLOROTOLUENE
73U	1,2-DICHLOROETHANE	73U	P-CHLOROTOLUENE
73U	BENZENE	73U	1,3-DICHLOROBENZENE
73U	TRICHLOROETHENE(TRICHLOROETHYLENE)	73U	1,4-DICHLOROBENZENE
73U	1,2-DICHLOROPROPANE	73U	1,2-DICHLOROBENZENE
73U	DIBROMOMETHANE	48.0	PERCENT MOISTURE
73U	BROMODICHLOROMETHANE		

REMARKS ***REMARKS***

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 06/08/89

PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SD-01 BACKGROUND SEDIMENT SOIL COLLECTION START: 05/03/89 1630 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
2000UJ	BIS(2 CHLOROETHYL) ETHER
2000UJ	BIS(2-CHLOROISOPROPYL) ETHER
2000UJ	N-NITROSODI-N-PROPYLAMINE
2000UJ	HEXACHLOROETHANE
2000UJ	NITROBENZENE
2000UJ	ISOPHORONE
2000UJ	BIS(2-CHLOROETHOXY) METHANE
2000UJ	1,2,4-TRICHLOROBENZENE
2000UJ	NAPHTHALENE
2000UJ	4-CHLOROANILINE
2000UJ	HEXACHLOROBUTADIENE
2000UJ	2-METHYLNAPHTHALENE
2000UJ	HEXACHLOROCYCLOPENTADIENE (HCCP)
2000UJ	2-CHLORONAPHTHALENE
2000UJ	2-NITROANILINE
2000UJ	DIMETHYL PHTHALATE
2000UJ	ACENAPHTHYLENE
2000UJ	2,6-DINITROTOLUENE
2000UJ	3-NITROANILINE
2000UJ	ACENAPHTHENE
2000UJ	DIBENZOFURAN
2000UJ	2,4-DINITROTOLUENE
2000UJ	DIETHYL PHTHALATE
2000UJ	FLUORENE
2000UJ	4-CHLOROPHENYL PHENYL ETHER
2000UJ	4-NITROANILINE
2000UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
2000UJ	4-BROMOPHENYL PHENYL ETHER
2000UJ	HEXACHLOROBENZENE (HCB)
2000UJ	PHENANTHRENE
2000UJ	ANTHRACENE
2000UJ	DI-N-BUTYLPHTHALATE

UG/KG	ANALYTICAL RESULTS
2000UJ	FLUORANTHENE
2000UJ	PYRENE
2000UJ	BENZYL BUTYL PHTHALATE
2000UJ	3,3'-DICHLOROBENZIDINE
2000UJ	BENZO(A)ANTHRACENE
2000UJ	CHRYSENE
2000UJ	BIS(2-ETHYLHEXYL) PHTHALATE
2000UJ	DI-N-OCTYLPHTHALATE
2000UJ	BENZO(B AND/OR K)FLUORANTHENE
2000UJ	BENZO-A-PYRENE
2000UJ	INDENO (1,2,3-CD) PYRENE
2000UJ	DIBENZO(A,H)ANTHRACENE
2000UJ	BENZO(GHI)PERYLENE
2000UJ	PHENOL
2000UJ	2-CHLOROPHENOL
4000UJ	BENZYL ALCOHOL
2000UJ	2-METHYLPHENOL
2000UJ	(3-AND/OR 4-)METHYLPHENOL
2000UJ	2-NITROPHENOL
2000UJ	2,4-DIMETHYLPHENOL
4000UJ	BENZOIC ACID
2000UJ	2,4-DICHLOROPHENOL
2000UJ	4-CHLORO-3-METHYLPHENOL
2000UJ	2,4,6-TRICHLOROPHENOL
2000UJ	2,4,5-TRICHLOROPHENOL
4000UJ	2,4-DINITROPHENOL
4000UJ	4-NITROPHENOL
2000UJ	2,3,4,6-TETRACHLOROPHENOL
4000UJ	2-METHYL-4,6-DINITROPHENOL
4000UJ	PENTACHLOROPHENOL
33	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 89-400   SAMPLE NO. 34906  SAMPLE TYPE: SOIL       PROG ELEM: NSF   COLLECTED BY: R YOUNG                **
**   SOURCE: WESTINGHOUSE ELECT                                     CITY: ATHENS               ST: GA                     **
**   STATION ID: SD-01 BACKGROUND SEDIMENT SOIL                     COLLECTION START: 05/03/89  1630   STOP: 00/00/00     **
**                                                                                                                        **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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ANALYTICAL RESULTS UG/KG

2000JN HEXADECANOIC ACID

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SD-02 SEDIMENT SOIL #02

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1815 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
2500U	BIS(2-CHLOROETHYL) ETHER
2500U	BIS(2-CHLOROISOPROPYL) ETHER
2500U	N-NITROSODI-N-PROPYLAMINE
2500U	HEXACHLOROETHANE
2500U	NITROBENZENE
2500U	ISOPHORONE
2500U	BIS(2-CHLOROETHOXY) METHANE
2500U	1,2,4-TRICHLOROBENZENE
2500U	NAPHTHALENE
2500U	4-CHLOROANILINE
2500U	HEXACHLOROBUTADIENE
2500U	2-METHYLNAPHTHALENE
2500U	HEXACHLOROCYCLOPENTADIENE (HCCP)
2500U	2-CHLORONAPHTHALENE
2500U	2-NITROANILINE
2500U	DIMETHYL PHTHALATE
2500U	ACENAPHTHYLENE
2500U	2,6-DINITROTOLUENE
2500U	3-NITROANILINE
2500U	ACENAPHTHENE
2500U	DIBENZOFURAN
2500U	2,4-DINITROTOLUENE
2500U	DIETHYL PHTHALATE
2500U	FLUORENE
2500U	4-CHLOROPHENYL PHENYL ETHER
2500U	4-NITROANILINE
2500U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
2500U	4-BROMOPHENYL PHENYL ETHER
2500U	HEXACHLOROBENZENE (HCB)
2500U	PHENANTHRENE
2500U	ANTHRACENE
2500U	DI-N-BUTYLPHTHALATE

UG/KG	ANALYTICAL RESULTS
2500U	FLUORANTHENE
2500U	PYRENE
2500U	BENZYL BUTYL PHTHALATE
2500U	3,3'-DICHLOROBENZIDINE
2500U	BENZO(A)ANTHRACENE
2500U	CHRYSENE
2500U	BIS(2-ETHYLHEXYL) PHTHALATE
2500U	DI-N-OCTYLPHTHALATE
2500U	BENZO(B AND/OR K)FLUORANTHENE
2500U	BENZO-A-PYRENE
2500U	INDENO (1,2,3-CD) PYRENE
2500U	DIBENZO(A,H)ANTHRACENE
2500U	BENZO(GHI)PERYLENE
2500U	PHENOL
2500U	2-CHLOROPHENOL
5000U	BENZYL ALCOHOL
2500U	2-METHYLPHENOL
2500U	(3-AND/OR 4-)METHYLPHENOL
2500U	2-NITROPHENOL
2500U	2,4-DIMETHYLPHENOL
5000U	BENZOIC ACID
2500U	2,4-DICHLOROPHENOL
2500U	4-CHLORO-3-METHYLPHENOL
2500U	2,4,6-TRICHLOROPHENOL
2500U	2,4,5-TRICHLOROPHENOL
5000U	2,4-DINITROPHENOL
5000U	4-NITROPHENOL
2500U	2,3,4,6-TETRACHLOROPHENOL
5000U	2-METHYL-4,6-DINITROPHENOL
5000U	PENTACHLOROPHENOL
48	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT CITY: ATHENS ST: GA **
** STATION ID: SD-02 SEDIMENT SOIL #02 COLLECTION START: 05/03/89 1815 STOP: 00/00/00 **
**
*** ***

ANALYTICAL RESULTS UG/KG

6000JN	HEXADECANOIC ACID
700JN	OCTADECANOIC ACID
N	PETROLEUM PRODUCT

FOOTNOTES
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SD-01 BACKGROUND SEDIMENT SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1630 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
9.5U	ALDRIN
9.5U	HEPTACHLOR
9.5U	HEPTACHLOR EPOXIDE
9.5U	ALPHA-BHC
9.5U	BETA-BHC
9.5U	GAMMA BHC (LINDANE)
9.5U	DELTA-BHC
9.5U	ENDOSULFAN I (ALPHA)
9.5U	DIELDRIN
9.5U	4,4'-DDT (P,P'-DDT)
9.5U	4,4'-DDE (P,P'-DDE)
9.5U	4,4'-DDD (P,P'-DDD)
9.5U	ENDRIN
9.5U	ENDOSULFAN II (BETA)
9.5U	ENDOSULFAN SULFATE
49U	CHLORDANE (TECH. MIXTURE) /1
73U	PCB-1242 (AROCLOR 1242)
73U	PCB-1254 (AROCLOR 1254)
73U	PCB-1221 (AROCLOR 1221)

UG/KG	ANALYTICAL RESULTS
73U	PCB-1232 (AROCLOR 1232)
73U	PCB-1248 (AROCLOR 1248)
73U	PCB-1260 (AROCLOR 1260)
73U	PCB-1016 (AROCLOR 1016)
360U	TOXAPHENE
---	CHLORDENE /2
---	ALPHA-CHLORDENE /2
---	BETA CHLORDENE /2
---	GAMMA-CHLORDENE /2
---	1-HYDROXYCHLORDENE /2
---	GAMMA-CHLORDANE /2
---	TRANS-NONACHLOR /2
---	ALPHA-CHLORDANE /2
---	CIS-NONACHLOR /2
---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
22U	METHOXYCHLOR
9.5U	ENDRIN KETONE
33	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SD-02 SEDIMENT SOIL #02 COLLECTION START: 05/03/89 1815 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
12U	ALDRIN	90U	PCB-1232 (AROCLOR 1232)
12U	HEPTACHLOR	90U	PCB-1248 (AROCLOR 1248)
12U	HEPTACHLOR EPOXIDE	90U	PCB-1260 (AROCLOR 1260)
12U	ALPHA-BHC	90U	PCB-1016 (AROCLOR 1016)
12U	BETA-BHC	450U	TOXAPHENE
12U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
12U	DELTA-BHC	---	ALPHA-CHLORDENE /2
12U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
12U	DIELDRIN	---	GAMMA-CHLORDENE /2
12U	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
12U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
12U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
12U	ENDRIN	---	ALPHA-CHLORDANE /2
12U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
12U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
61U	CHLORDANE (TECH. MIXTURE) /1	28U	METHOXYCHLOR
90U	PCB-1242 (AROCLOR 1242)	12U	ENDRIN KETONE
90U	PCB-1254 (AROCLOR 1254)	48	PERCENT MOISTURE
90U	PCB-1221 (AROCLOR 1221)		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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D-586-1-0-30

6-8-90
LSIE
James P. Thomas

DRAFT

SCREENING SITE INSPECTION REPORT, PHASE II
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA
EPA ID #: GAD003295144

Prepared Under
TDD No. F4-8903-40
CONTRACT NO. 68-01-7346

Revision 0

FOR THE

WASTE MANAGEMENT DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

MAY 30, 1990

NUS CORPORATION
SUPERFUND DIVISION

Prepared By	Reviewed By	Reviewed By	Approved By
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NOTICE

The information in this document has been funded wholly by the United States Environmental Protection Agency (EPA) under Contract Number 68-01-7346 and is considered proprietary to the EPA.

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TABLES

EXECUTIVE SUMMARY

The Westinghouse Electric Corporation (WEC) site is located north of Athens, Clarke County, Georgia. Operations at the facility include the manufacturing and repairing of overland distribution transformers. Between 1958 and 1970, WEC disposed of wastes generated from the manufacturing process in an onsite landfill. Wastes disposed of in the landfill may include spent solvents, acids and bases, paint and oil.

The WEC site is located in the Piedmont Physiographic Province. The rocks underlying this province are massive igneous and metamorphic rocks. The aquifer used in the study area can be characterized as a crystalline rock aquifer. In this aquifer, groundwater is stored in the unconsolidated material overlying the crystalline rock and within fractures that have formed in the crystalline rock. However, only three private wells are located in the 4-mile site radius.

Water is supplied to Athens and the surrounding areas by surface water obtained from the North and Middle Oconee rivers. One intake is located approximately 2.65 stream miles south of the site on the North Oconee River. There is a slight potential for site-related contaminant migration to the surface water pathway during periods of heavy rainfall. Approximately 98,800 persons are served by the Athens Water Department. The results of sediment sampling revealed the presence of inorganic contaminants with significantly higher concentrations than background conditions.

Organic and inorganic analytical results revealed the presence of site-related contaminants in the surface soils collected. Organic contaminants detected from the samples include fluoranthene, pyrene, benzo(a) anthracene, and benzo (b and/or k) fluoranthene. Inorganic elements revealed in samples included barium, chromium, copper, lead and zinc. There is a population of approximately 49,884 within the 4-mile site radius. Access to the landfill is unrestricted, and uncontained contaminated surface soils could be dispersed by the wind. Potentially affected targets include employees at the WEC facility and adjacent industrial properties and 486 people residing within the 1-mile site radius.

Based on the aforementioned information, FIT 4 recommends that a Listing Site Inspection, Phase I, be conducted at the WEC site.

1.0 INTRODUCTION

The NUS Corporation Region 4 Field Investigation Team (FIT) was tasked by the U. S. Environmental Protection Agency (EPA), Waste Management Division to conduct two screening site inspections (SSI) at the Westinghouse Electric Corporation site in Athens, Clarke County, Georgia. The inspections were performed under the authority of the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA). The tasks were performed to satisfy the requirements stated in Technical Directive Document (TDD) numbers F4-8903-40 and F4-8904-04. The field investigations were conducted May 3-4, 1989.

1.1 OBJECTIVES

The objectives of this inspection were to determine the nature of contaminants present at the site and to determine if a release of these substances has occurred or may occur. Further, this inspection sought to determine the possible pathways by which contamination could migrate from the site and the populations and environments it would potentially affect. Through these objectives, a recommendation was made regarding future activities at the site.

1.2 SCOPE OF WORK

The objectives were achieved through the completion of a number of specific tasks. These activities were to:

- Obtain and review relevant background materials.
- Obtain information on local water systems.
- Evaluate target population within a 4-mile radius of the site with regard to groundwater and 15-stream miles with regard to surface water use.
- Develop a site sketch, drawn to scale.
- Collect environmental samples.

2.0 SITE CHARACTERIZATION

2.1 SITE BACKGROUND AND HISTORY

The Westinghouse Electric Corporation (WEC) is located on Newton Bridge Road, in Athens, Clarke County, Georgia. The facility has been actively manufacturing and repairing overhead distribution transformers at the present location since 1957 Wastes generated from the manufacturing processes were disposed of in an onsite landfill from 1958 to 1970 in fiber containers, and five- and 55-gallon metal drums (Refs. 1, 2). Between 1971 and 1977, generated wastes were disposed of at the Clarke County landfill located east of Athens, Georgia. During 1978 and 1979, WEC began shipping accumulated wastes to SCA services in South Carolina. Current disposal practices employ reclamation and incineration (Ref. 1).

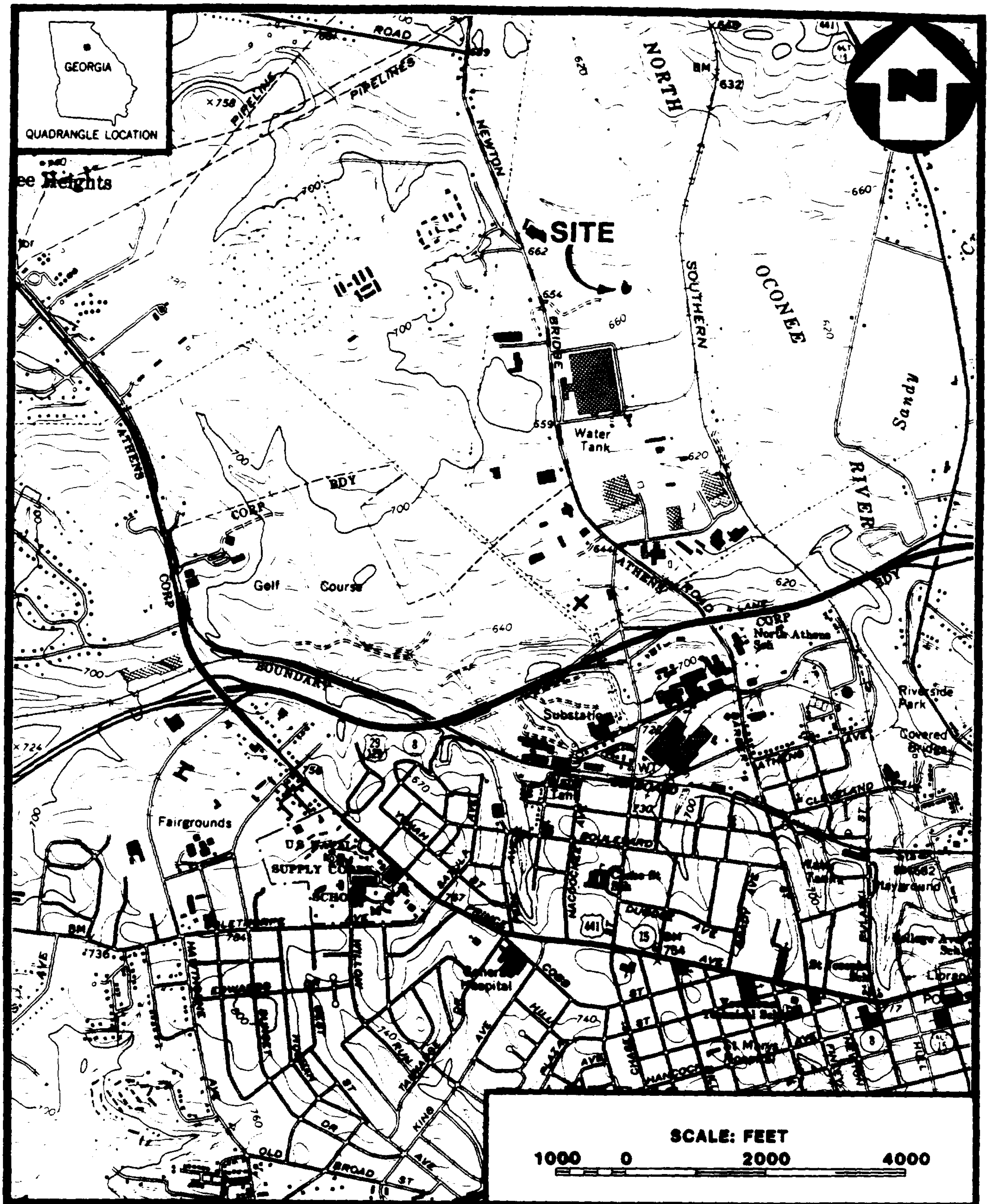
Sometime during 1988, WEC representatives began reviewing all of their facilities to ensure compliance with federal, state, and local environmental regulations. It was at this time that WEC representatives became aware of past disposal practices involving the landfill (Ref. 3). On December 20, 1988, WEC submitted an EPA Notification of Hazardous Waste Site (EPA Form 8900-1) for the Athens facility (Ref. 2).

The Part A Application for this facility was withdrawn in 1982, and the facility is presently classified as a generator of hazardous waste (Ref. 4).

2.2 SITE DESCRIPTION

2.2.1 Site Features

The WEC facility, at 33°58'31.0" N latitude and 083°23'44.0" W longitude, is located in an industrial district north of the city of Athens, Clarke County, Georgia (Figure 1) (Appendix A). The entire WEC facility is approximately 237.8 acres (Ref. 2). The landfill, which is located 900 feet northeast of the main facility, is irregularly shaped and consists of approximately 1 acre. The site is located on a ridge, and drainage is to the east and northeast (Figure 2) (Ref. 5, Appendix A). Facility slope is approximately 2.0 percent (Appendix A).

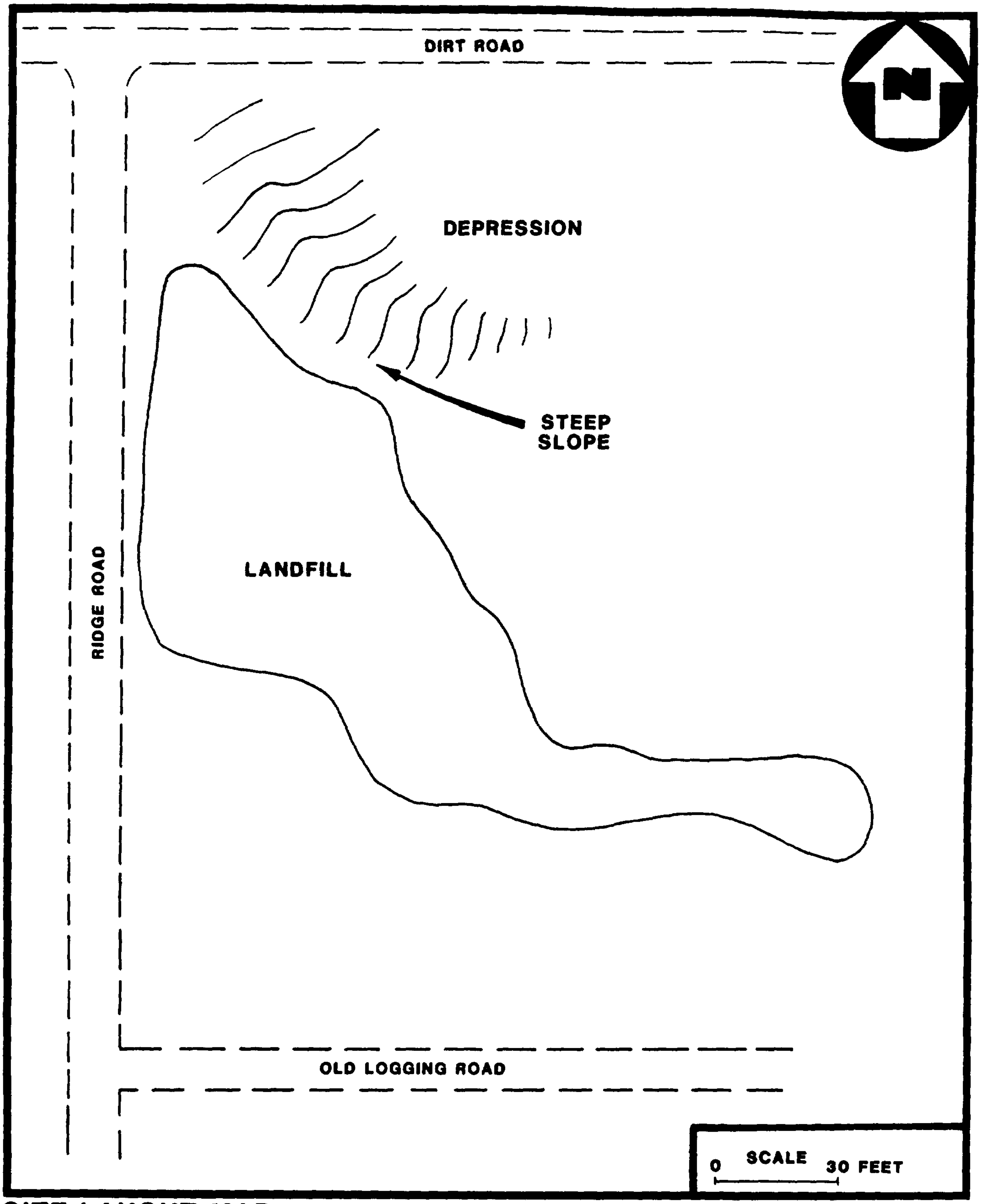


BASE MAP IS A PORTION OF THE USGS 7.5 MINUTE QUADRANGLE, ATHENS WEST, GA. 1984.

SITE LOCATION MAP
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, GEORGIA

FIGURE 1

NUS CORPORATION



SITE LAYOUT MAP
WESTINGHOUSE ELECTRIC
CORPORATION LANDFILL
ATHENS, CLARKE COUNTY, GEORGIA

FIGURE 2

NUS CORPORATION

The landfill, which is heavily vegetated with no evidence of any ongoing activities, is readily accessible. An unrestricted dirt road located adjacent to the landfilled area is accessible from the WEC north parking lot. In addition, no fence or barriers to entry are in place around the landfill. The dirt road leading from the north parking lot bounds the site to the north and west. The site is bounded by an old logging dirt road to the south, and woods to the east (Ref. 5).

2.2.2 Waste Characteristics

Westinghouse disposed of halogenated solvents and treated acids and bases resulting from electrical transformer manufacturing processes in a landfill from 1958 to 1970 (Ref. 6). The hazardous waste present at the facility include spent solvents, acids and bases, paint, and oil. The acids are a mixture of phosphoric acid and hydrochloric acid, known as bright dip. Other wastes identified by the preliminary assessment were oily waste, solvents, heavy metals, and methyl ethyl ketone (Ref. 1). An identification table of the waste liquids included cleaning mixtures (kerosenes), wire enamel thinners, enamel paint strippers, paint thinners (xylene), wire drawing and rolling lubes, transformer oil, and lubricating oil (Ref. 7). WEC representatives stated that mineral oil was used in the transformers instead of PCBs (Ref. 8).

3.0 REGIONAL POPULATIONS AND ENVIRONMENTS

3.1 POPULATION AND LAND USE

3.1.1 Demography

The study area is located approximately 1 mile north of Athens and is adjacent to industrial properties and rural areas (Appendix A). The population of Athens, Georgia is approximately 45,000 (including students attending the University of Georgia), the major portion of which is encompassed by the southeast quadrant of the 4-mile site radius (Ref. 9). Population density increases rapidly to the south of the WEC site. To the east, north, and west, however, population decreases rapidly (Appendix A). The population distribution is 486 between 0 and 1 mile; 18,718 between 1 and 2 miles; 18,265 between 2 and 3 miles; and 12,415 between 3 and 4 miles (Ref. 10).

3.1.2 Land Use

Within a 4-mile radius of the site, the area is comprised, in descending percentage, of rural/undeveloped, residential, commercial, and industrial property. The nearest residence is located approximately 0.5 mile west-northwest of the landfill. The closest multifamily dwelling, Rolling Ridge Apartments, is located 0.7 mile northwest of the site and consists of sixteen apartment buildings. As seen from the USGS topographic map, the WEC landfill is within 1 mile of the North Athens Elementary School. Students attend 14 other schools, including the University of Georgia, in the 4-mile radius (Ref. 8, Appendix A).

The North Oconee River Park, the closest park to the WEC landfill, is situated along the banks of the North Oconee River approximately 1 mile southeast of the site. The park offers picnicing and fishing (Ref. 8).

The nearest commercial area is located in downtown Athens approximately 2 miles south of the site. This area is a mixture of shops, banks, and restaurants, which comprises the downtown district (Ref. 8).

Areas of dense industrial development are located south of the site. However, the nearest industry, Lyons Textile Mills, is located approximately 0.3 mile northwest of the WEC site (Ref. 8).

3.2 SURFACE WATER

3.2.1 Climatology

The WEC landfill is located within the Piedmont Physiographic Province. Average rainfall near the facility is 44 inches, and mean annual lake evaporation is 42 inches. Average net annual precipitation is 2 inches. The rainy season in the Piedmont Physiographic Province occurs during the warm period from May to August (Ref. 11). The Athens area has a relatively mild climate. Temperatures average 42°F in January and 79°F in July (Ref. 12, p. 2). Average annual rainfall is 48 inches (Ref. 13, p. 43). There are two periods of peak rainfall, one in the late winter and one in mid-summer (Ref. 12, p. 5). Net annual precipitation is 2 inches (Ref. 13, pp. 43, 63). The 1-year, 24-hour rainfall is 3.25 inches (Ref. 14).

3.2.2 Overland Drainage

Surface water runoff follows two patterns at the WEC landfill. Rainwater falling on the west, south, east, and center portions of the site trends in an eastward direction toward a small, swampy basin. The swampy basin is less than an acre in size, and there are no routes for surface water migration from the basin. Surface water runoff for the remaining area of the site (north portion) drains in a northeastward direction to an oval-shaped slight depression. The depression is bounded by the higher ground of the landfilled area to the west, south, and east. A dirt road bounds the north portion of the depression. Surface water that collects in the swampy basin and depression would percolate down to groundwater (Ref. 8). However, during extremely heavy rainfall, surface water may migrate to a swampy region located approximately 1000 feet northeast of the landfill.

3.2.3 Potentially Affected Water Bodies

Water that collects in the swampy region flows in a northeasterly direction for approximately 0.3 mile and drains into the North Oconee River (Refs. 5, 8, Appendix A). The previously mentioned North Oconee River Park is located 2.0 stream miles downgradient from the confluence of the swamp and river (Ref. 8, Appendix A). Also, one of the water intakes for the municipal water supply is located 2.65 stream miles downgradient from the swamp and river confluence. Water is supplied to Athens and surrounding areas by surface water obtained from the North Oconee and Middle Oconee rivers (Ref. 15). The water obtained from the two intakes is treated and mixed prior to distribution. A third intake is located on Sandy Creek. Water is pumped from the intake to a reservoir. The water is allowed to settle and is used only during times when the North and Middle Oconee rivers are low.

The third intake is not located along the surface water migration pathway. The municipal system serves approximately 26,000 connections (Ref. 15).

3.3 GROUNDWATER

3.3.1 Hydrogeology

The site is located in the Piedmont Physiographic Province. The rocks underlying this province are massive igneous and metamorphic rocks of relatively low permeability (Ref. 16, pp. 4, 5).

The aquifer used in the study area can be characterized as a crystalline rock aquifer. In this aquifer, groundwater is stored in the unconsolidated material overlying the crystalline rock and within fractures that have formed in the crystalline rock (Ref. 16, p. 13). The residual soils (regolith) overlying bedrock are capable of storing large quantities of groundwater, and well yields are generally highest in areas that have a thick regolith that is saturated with water (Ref. 17, pp. 8-11).

The site is underlain by amphibolite interlayered with biotite schist and biotite gneiss. Wells intercepting contact zones between these rock units often have increased permeability as do wells that have intersect fault zones. Well yields range from 20 to 225 gallons per minute (gpm), with an average yield of 52 gpm. The average depth of wells in the Athens area is 246 feet with a typical casing depth of 69 feet (Ref. 17, plate 1). Few wells are completed to depths greater than 400 feet due to a decrease in the size and number of fractures within the rock below this depth (Ref. 17, p. 9).

Groundwater recharge occurs in topographic highs and groundwater discharge occurs in topographically low areas. The depth to the water table is also dependent on local topography. The water table may be at or near land surface in stream valleys. However, on steep hills or narrow ridges, the depth to the water table may be much greater (Ref. 17, p. 11).

The aquifer in the regolith is unconfined, and groundwater flow generally follows local topographic gradients (Ref. 17, p. 11). Groundwater flow within fractures of the underlying crystalline rock is influenced by fracture orientation. Wells penetrating deeper fracture systems may intercept groundwater that is under confined conditions.

3.3.2 Aquifer Use

There is very little use of groundwater in the study area. Three private wells were identified within the 3-mile site radius. The closest well is located 1 mile west of the site (Ref. 15).

3.4 SUMMARY OF POTENTIALLY AFFECTED POPULATIONS AND ENVIRONMENTS

The pathways of concern for the site include surface water, air, and onsite exposure. The groundwater pathway is not a concern due to the almost nonexistent use of the aquifer within the 4-mile site radius.

The air and onsite exposure pathways are the primary pathways of concern due to the possible presence of uncontained and contaminated soils. Potentially affected targets within a 4-mile site radius include residents, employees, and students. The population of residents within a 4-mile radius of the site is estimated at 49,884 (Ref. 10). Targets for onsite exposure include employees at the WEC facility and adjacent industrial properties and residents within a 1-mile radius of the site. However, the population within a 1-mile site radius is only 486 (Ref. 10, Appendix A).

Potential for site-related contaminant release to the surface water pathway is unlikely; however, it may be possible during periods of extremely heavy rainfall. Potentially affected targets along the extended surface migration pathway include those persons using the North Oconee River for recreational purposes and the population of 98,800 (26,000 x 3.8 per household) that is served by the Athens Water Department.

4.0 FIELD INVESTIGATION

4.1 GEOPHYSICAL SCREENING

4.1.1 Introduction

The purpose of geophysical screening was to delineate areas where hazardous waste was alleged to have been buried and to provide the sampling team with information that would aide in the selection of environmental sampling locations. To accomplish this task, a suspected disposal trench area was surveyed with a Proton Precision Magnetometer. A survey with an EM-31 Ground Conductivity Meter was also planned; however, this instrument was not functioning properly and could not be used.

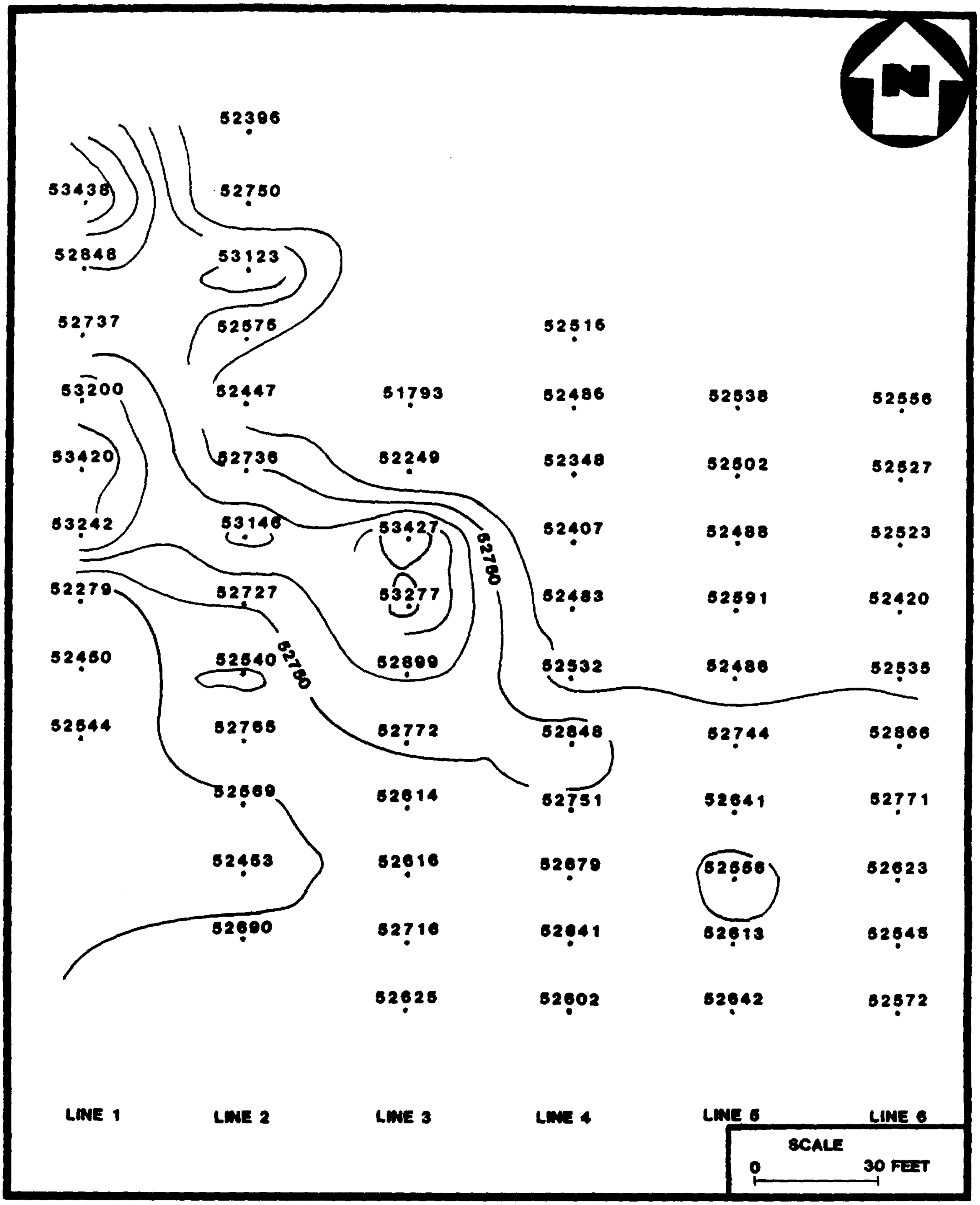
4.1.2 Methodology

The magnetometer was calibrated in an undisturbed area to the north of the disposal trench. After calibration, nine background magnetic readings were taken at 10-foot spacings along an old east-west trending logging road located south of the trench (Figure 3). The readings increased fairly uniformly from 52,588 gammas at the station farthest downhill to 52,676 gammas at the top of the hill. This variation in magnetic intensity was attributed to the presence of fill material that contained cobbles and boulders of higher conductivity metamorphic rock. The northwest portion of the grid (Figure 3), which appeared to be less disturbed, (the entire area has been logged) had magnetic readings that averaged around 52,500 gammas. This area did not appear to have any fill and is probably more representative of true background conditions (Ref. 18).

Six lines were traversed in a north-south direction. The distance between lines was 30 feet and stations along each line were at 15-foot intervals. Grid lines were surveyed using a compass and a 300-foot tape. Individual stations were marked with flagging (Ref. 18).

4.1.3 Results of the Geophysical Screening

Significant magnetic anomalies were detected within the area that was surveyed. Readings greater than 52,700 gammas were considered to be anomalous. These magnetic anomalies do not correspond with what appeared to be the trench boundary. Line 2 followed the approximate axis of



ELECTRIC MAGNETIC SURVEY
WESTINGHOUSE ELECTRIC CORPORATION LANDFILL
ATHENS, CLARKE COUNTY, GEORGIA

FIGURE 3

NUS CORPORATION

the visible trench. East of Line 6, a 30-foot by 30-foot area with magnetic readings greater than 53,000 gammas was detected. Two locations within this area were targeted for sampling. Another anomalous area to the north and west of Line 1 was found. Heavy brush and overgrowth prevented a systematic survey of this location. Figure 3 is a magnetic intensity contour map. Anomalous areas are shown in this figure. The road along the top of the ridge, about 30 feet west of Line 1 was surveyed with the magnetometer after the trucks were moved. No readings above background were detected along the road (Ref. 18).

The site is located in a rural area with no sources of interference for geophysical instruments. The magnetometer was effective in locating magnetic anomalies at this site. Some of the visually disturbed areas did not contain magnetic anomalies. Since some of the waste was reportedly buried in nonmetallic drums, the EM-31 Conductivity Meter would be effective in detecting disturbed areas that did not contain any metallic debris. An EM-31 Conductivity Meter may be used in the future to refine the boundaries of the waste burial area, should removal of the waste be necessary. Appendix D contains field data sheets, as well as additional information on the use and applications of the magnetometer and the conductivity meter.

4.2 SAMPLE COLLECTION

4.2.1 Sample Collection Methodology

All sample collection, sample preservation, and chain-of-custody procedures used during this investigation were in accordance with the standard operating procedures as specified in Sections 3 and 4 of the Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division, April 1, 1986.

4.2.2 Duplicate Samples

Split groundwater samples were requested for groundwater by the WEC representatives. However, a background groundwater sample could not be obtained, and the remaining scheduled groundwater samples were canceled.

4.2.3 Description of Samples and Sample Locations

Nine environmental samples were collected for the investigation: four surface soil samples, three subsurface soil samples, and two sediment samples. Sample codes, descriptions, and locations are present in Table 1 and illustrated in Figures 4 and 5.

The surface soil samples, collected from 2 to 12 inches below land surface (bls), included one background sample and three samples from the landfilled area.

The three subsurface soil samples, including one background sample, were collected between 2 and 5 feet bls. One sample was collected from the landfilled area, and the remaining sample was collected east of the landfill at a location downgradient of surface water runoff.

One sediment sample was obtained from an unnamed intermittent creek northwest of the site and served as the background sample. A second sediment sample was collected at the confluence of the intermittent creek, which had developed into a swampy area, and the North Oconee River located northeast of the site.

4.3 SAMPLE ANALYSIS

4.3.1 Analytical Support and Methodology

All samples collected were analyzed under the Contract Laboratory Program (CLP) and analyzed for all parameters listed in the Target Compound List (TCL). Organic and inorganic analysis of soil samples was performed by Region IV Environmental Protection Agency analytical service laboratory located in Athens, Georgia.

All laboratory analyses and laboratory quality assurance procedures used during this investigation were in accordance with standard procedures and protocols as specified in the Analytical Support Branch Operations and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division; revised June 1, 1985 or as specified by the existing United States Environmental Protection Agency standard procedures and protocols for the contract analytical laboratory program.

TABLE 1

SAMPLE CODES AND LOCATIONS, AND RATIONALE
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

Sample Code	Location and Rationale	Collection Time	Date	Depth (ft bls).	Remarks
WH-SS-01	Northwest of site from undisturbed area to establish background conditions	1515	05/03	-	-
WH-SB-01	Northwest of site from undisturbed area to establish background conditions	1525		5-6	-
WH-SD-01	Northwest of site from an intermittent stream upgradient of landfill to establish background conditions	1525	05/03	-	-
WH-SD-02	Confluence of stream and North Oconee River downgradient of landfill to detect contaminant migration off site	1815	05/03	-	-
WH-SS-02	East area of landfill taken at magnetic anomaly identified during geophysical survey to identify source of contamination	1020	05/04	-	-
WH-SB-02	East area of landfill taken at magnetic anomaly identified during geophysical survey to identify source of contamination	0950	05/04	5-6	-
WH-SS-03	Northwest area of landfill taken at magnetic anomaly identified during geophysical survey to identify source of contamination	1030	05/04	-	-
WH-SB-03	East area of landfill on west border of closed basin to identify contaminant migration from landfill	1150	05/04	2-3	-

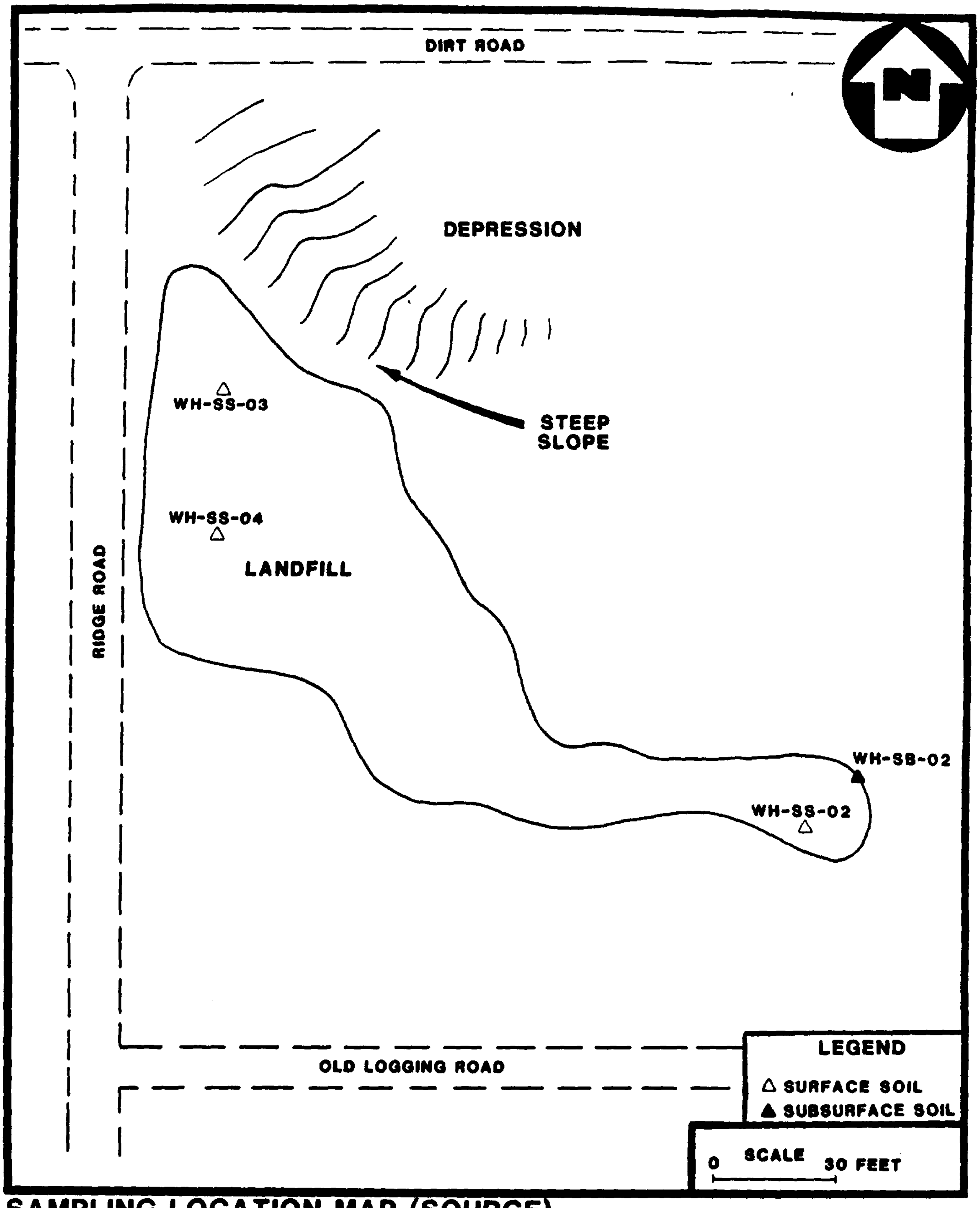
WH - Westinghouse Electric
SS - Surface Soil
SB - Subsurface Soil
SD - Sediment

TABLE 1

SAMPLE CODES AND LOCATIONS, AND RATIONALE
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

Sample Code	Location and Rationale	Collection Time	Date	Depth (ft bls).	Remarks
WH-SS-04	Northwest area of landfill taken at magnetic anomaly identified during geophysical survey to identify source of contamination	1120	05/04	-	-

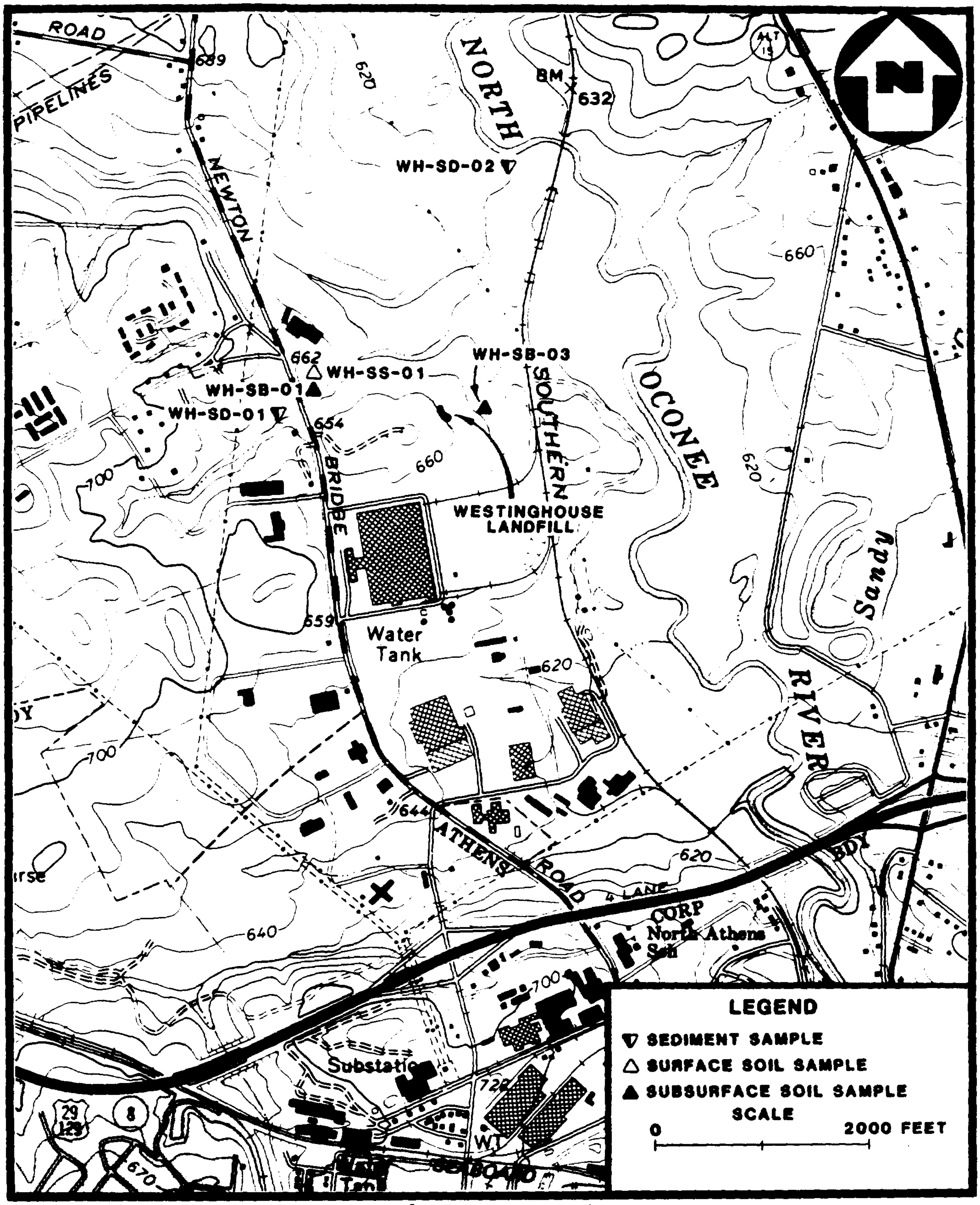
WH - Westinghouse Electric
SS - Surface Soil
SB - Subsurface Soil
SD - Sediment



SAMPLING LOCATION MAP (SOURCE)
WESTINGHOUSE ELECTRIC
CORPORATION LANDFILL
ATHENS, CLARKE COUNTY, GEORGIA

FIGURE 4

NUS CORPORATION



SAMPLING LOCATION MAP (NONSOURCE)
WESTINGHOUSE ELECTRIC
CORPORATION LANDFILL
ATHENS, CLARKE COUNTY, GEORGIA

FIGURE 5

NUS CORPORATION

4.3.2 Presentation of Analytical Data Quality

All analytical data were subjected to a quality assurance review as described in the EPA, Environmental Services Division laboratory data evaluation guidelines. In the tables, some of the concentrations of the organic and inorganic parameters have been flagged with a "J" This indicates that the qualitative analysis was acceptable, but the quantitative value has been estimated. A few other compounds are flagged with an "N" indicating that they were detected based on the presumptive evidence of their presence. This means that the compound was tentatively identified, and its detection cannot be used as positive identification of its presence. The complete analytical data sheets are presented in Appendix B.

4.3.3 Presentation of Analytical Results

Throughout the following discussion of analytical results, the concentrations of some of the contaminants detected have been described as "significant". This means that the concentration was either three times that found in the background sample or it was three times the minimum quantitation limit (MQL).

Sample analyses detected several inorganic constituents in the soil and sediment samples. Significant concentrations of chromium, copper, lead, and zinc were found in samples WH-SS-03, WH-SS-04, and WH-SD-02.Cobalt was found in subsurface soil sample WH-SB-03 at 15 mg/kg (3 x MQL). Sample WH-SB-03 also contained 1300 mg/kg manganese (5 x background) and 0.1 mg/kg mercury (20 x MQL). Inorganic analytical results can be found in Tables 2, 3, and 4.

A large number of organic constituents were found in the surface soil samples, WH-SS-02, WH-SS-03, and WH-SS-04. Sample WH-SS-02 contained a total of 4 mg/kg (estimated) of substituted benzenes (tentatively identified), 200 mg/kg unidentified compounds, and more than 450 mg/kg polynuclear aromatic (PNA) compounds including 16 mg/kg phenanthrene (9.4 x MQL), 78 mg/kg fluoranthene (46 x MQL), 67 mg/kg pyrene (39 x MQL), 28 mg/kg benzo (a) anthracene (16 x MQL), 25 mg/kg chrysene (15 x MQL), 51 mg/kg benzo (b and/or k) fluoranthene (30 x MQL), and 24 mg/kg benzo-a-pyrene (14 x MQL). The other PNAs are shown as estimated concentrations, and some of them are tentatively identified. These compounds are components of lubricating oils.

TABLE 2

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (mg/kg)	Background	Onsite		
	WH-SS-01	WH-SS-02	WH-SS-03	WH-SS-04
ALUMINUM	30,000	19,000	28,000	18,000
ANTIMONY	-	-	-	100
BARIUM	160	92	130	9000
CALCIUM	-	2200	-	1800
CHROMIUM	14	28	2400	8700
COBALT	15	5.9	-	55
COPPER	7.5	51	23,000	9900
IRON	26,000	14,000	29,000	29,000
LEAD	25	140	10,000	9000
MAGNESIUM	8300	1900	3500	1000
MANGANESE	800	320	500	210
MERCURY	-	-	0.05	0.10
NICKEL	-	6	-	58
POTASSIUM	7800	1800	-	-
VANADIUM	61	43	70	46
ZINC	53	100	3000	10,000
CYANIDE	-	0.25	-	1.2
TITANIUM	1800	710	1100	170
YTTRIUM	14	13	-	-
STRONTIUM	-	8.2	-	120

\- Material analyzed for but not detected above minimum quantitation limit

TABLE 3

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SUBSURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (mg/kg)	Background WH-SB-01	Onsite WH-SB-02	Downgradient WH-SB-03
ALUMINUM	27,000	55,000	50,000
BARIUM	26	30	60
CALCIUM	-	580	290
CHROMIUM	29	34	56
COBALT	-	-	15
COPPER	34	22	13
IRON	45,000	53,000	34,000
LEAD	29	42	21
MAGNESIUM	1100	2100	1200
MANGANESE	250	310	1300
MERCURY	-	-	0.1
NICKEL	14	-	11
POTASSIUM	1100	2500	1200
VANADIUM	120	150	81
ZINC	26	31	40
CYANIDE	-	-	0.33
TITANIUM	940	1900	1200
YTTRIUM	9.7	-	-

- Material analyzed for but not detected above minimum quantitation limit

TABLE 4

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SEDIMENT SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (mg/kg)	Background WH-SD-01	Downgradient WH-SD-02
ALUMINUM	4400	46 000
BARIUM	21	180
CALCIUM	150	1200
CHROMIUM	15	47
COBALT	-	18
COPPER	3.9	30
IRON	16 000	50 000
LEAD	6.3	45
MAGNESIUM	710	1900
MANGANESE	150	4500
POTASSIUM	820	1400
VANADIUM	42	120
ZINC	12	57
TITANIUM	410	1000
YTTRIUM	7.1	25
STRONTIUM	-	12

\- Material analyzed for but not detected above minimum quantitation limit

Sample WH-SS-03 contained 130 mg/kg of fatty acids or fatty acid derivatives, tentatively identified with estimated concentrations ranging from 40 to 2000 mg/kg. Fatty acids are components of drawing and rolling compounds (greases). This sample also contained an estimated 80 ug/kg xylene (2 x MQL) and a total estimated concentration of 75 mg/kg of seven tentatively identified alkyl benzenes, which are components of kerosenes and other solvents. This sample also contained a significant concentration of PCBs, 1100 ug/kg Aroclor 1242 (18 x MQL) and an estimated 350 ug/kg tentatively identified Aroclor 1260 (5.6 x MQL) and smaller concentrations of Aldrin, Dieldrin, and 4,4'-DDD.

Sample WH-SS-04 contained a total of over 22,000 mg/kg (2.2%) of alkyl substituted benzenes, including 1100 mg/kg ethyl benzene (28,200 x MQL) and 7100 mg/kg xylenes (182,000 x MQL). These are solvents used by Westinghouse in the manufacturing process and listed as components of the waste streams. The other substituted benzenes, tentatively identified with estimated concentrations ranging from 10 to 6000 mg/kg, are components of kerosene and fuel oils. This sample contained a total concentration of 2400 mg/kg PNAs including 620 mg/kg naphthalene (365 x MQL) and 240 mg/kg 2-methylnaphthalene (141 x MQL), 6200 mg/kg of fatty acids, 560 mg/kg phenols (antioxidant, surfactant, wood preservative, and insecticide) including 180 mg/kg 4-nitrophenol (54 x MQL) and 180 mg/kg 2, 4-dinitrophenol (54 x MQL), 290 mg/kg nonaromatic hydrocarbons, and 2000 mg/kg unidentified compounds and petroleum product. The contaminants in this sample are components of kerosene, solvents, and lubricants.

Sediment sample WH-SD-02 contained an estimated 6000 ug/kg of hexadecanoic acid (3 x background) and an estimated 700 ug/kg of octadecanoic acid (tentatively identified) and petroleum product.

Results of subsurface soil samples revealed no analytical significant contamination of organic constituents.

Organic analytical results can be found in Tables 5, 6, and 7.

TABLE 5

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (ug/kg)	Background	Onsite		
	WH-SS-01	WH-SS-02	WH-SS-03	WH-SS-04
PURGEABLE COMPOUNDS				
ETHYL BENZENE	-	-	-	1,100,000
(M- AND/OR P-)XYLENE	-	-	-	17,000,000
O-XYLENE	-	-	31J	5,400,000
TRIMETHYLBENZENE	-	-	200JN	5,000,000JN/3
PETROLEUM PRODUCT	-	-	N	-
EXTRACTABLE COMPOUNDS				
NAPHTHALENE	-	-	-	620,000
2-METHYLNAPHTHALENE	-		-	240,000
ACENAPHTHYLENE	-	2800J	-	-
4-NITROPHENOL	-	-	-	180,000
2,4-DINITROPHENOL	-	-	-	180,000
PHENANTHRENE	-	16,000	-	13,000J
ANTHRACENE	-	5200J	-	-
FLUORANTHENE	-	78,000	-	-
PYRENE	-	67,000	-	-
BENZO(A)ANTHRACENE	-	28,000	-	-
CHRYSENE	-	25,000	-	-
BENZO(B AND/OR K)FLUORANTHENE	-	51,000	-	-
BENZO-A-PYRENE	-	24,000	-	-
INDENO (1,2,3-CD) PYRENE	-	10,000J	-	-
DIBENZO(A,H)ANTHRACENE	-	3700J	-	-
BENZO(GHI)PERYLENE	-	9500J	-	-
HEXADECANOIC ACID	1000JN	-	2E6JN	4E6JN
OCTADECANOIC ACID	-	-	700,000JN	1E6JN
(DIMETHYLBUTENYLIDENE)BISBENZENE	-	2000JN	-	-
METHYLPHENANTHRENE	-	2000JN	-	-
CYCLOPENTAPHENANTHRENE	-	6000JN	-	-
PHENYLNAPHTHALENE	-	3000JN	-	-

- Material analyzed for but not detected above minimum quantitation limit
J Estimated value
N Presumptive evidence of presence of material

TABLE 5

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (ug/kg)	Background	Onsite		
	WH-SS-01	WH-SS-02	WH-SS-03	WH-SS-04
BIS(BUTADIYNEDIYL)BENZENE		2000JN	-	-
BENZONAPHTHOFURAN		9000JN/3	-	-
PHENANTHRENECARBONITRILE	-	3000JN	-	
METHYLFLUORANTHENE	-	20,000JN/4	-	-
BENZOFLUORENE	-	8000JN	-	-
BENZONAPHTHOTHIOPHENE	-	7000JN	-	-
BENZOFLUORANTHENE (NOT B OR K)	-	40,000JN/2	-	-
BENZOPHENANTHRENONE	-	2000JN	-	-
TETRADECANOIC ACID	-	-	200,000JN	200,000JN
METHYLPROPYLBENZENE	-	-	5000JN	900,000JN
DIETHYLMETHYLBENZENE	-	-	9000JN/2	100,000JN
(DIMETHYLPROPYL)BENZENE	-	-	6000JN	1E6JN/6
DIMETHYL(METHYLETHYL)BENZENE	-	-	10,000JN/2	1E6JN/6
ETHYLTRIMETHYLBENZENE	-	-	4000JN	100,000JN
HEXANOIC ACID	-	-	6000JN	-
COPAENE	-	-	3000JN	-
HEPTADECANOL	-	-	40,000JN/2	-
PENTADECANOIC ACID	-	-	40,000JN	-
TETRADECANAL	-	-	40,000JN	-
HEPTADECANOIC ACID	-	-	100,000JN	-
ETHYLDIMETHYLBENZENE	-	-	40,000JN/5	6E6JN/7
PROPYCYCLOHEXANE	-	-	-	10,000JN
PROPYLBENZENE	-	-	-	30,000JN
ETHYLMETHYLBENZENE	-	-	-	200,000JN/3
TRIMETHYLBENZENE	-	-	-	900,000JN/3
PROPENYLCYCLOHEXANE	-	-	-	200,000JN
DIHYDROINDENE	-	-	-	100,000JN
(METHYLPROPYL)BENZENE	-	-	-	20,000JN
BUTYLBENZENE	-	-	-	600,000JN

- Material analyzed for but not detected above minimum quantitation limit
J Estimated value
N Presumptive evidence of presence of material

TABLE 5

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (ug/kg)	Background	Onsite		
	WH-SS-01	WH-SS-02	WH-SS-03	WH-SS-04
METHYLDECAHYDRONAPHTHALENE		-	-	20,000JN
PENTYCYCLOHEXANE	-	-	-	30,000JN
METHYLDIHYDROINDENE	-	-	-	700,000JN
DIETHYLBENZENE	-		-	1E6JN
TETRADYDRONAPHTHALENE	-		-	200,000JN
((METHYLBENZYL)SULFONYL)PHENOL	-	-	-	100,000JN
DIMETHYDIHYDROINDENE	-	-	-	200,000JN/2
DIMETHYL(METHYLPROPYL)BENZENE	-	-	-	90,000JN/2
1-METHYLNAPHTHALENE	-	-	-	60,000JN
DIMETHYLNAPHTHALENE	-	-	-	20,000JN
HEXAMETHYLOCTAHYDROINDENE	-	-	-	100,000JN
BIS(DIMETHLETHYL)METHYLPHENOL	-	-	-	100,000JN
TRIMETHYLNAPHTHALENE	-	-	-	20,000JN/2
METHYL(METHYLETHYL)NAPHTHALENE	-	-	-	30,000JN
DIMETHYLPHENANTHRENE	-	-	-	30,000JN
HEXADECENOIC ACID	-	-	-	1E6JN
ETHYL(METHYLETHYL)BENZENE	-	-	-	2E6JN
METHYLPROPYLCYCLOHEXANE	-	-	-	50,000JN/2
PETROLEUM PRODUCT	-	-	N	N
UNIDENTIFIED COMPOUNDS/NO.	-	200,000J/2	2E6JN/11	2E6J/10
PESTICIDE\PCB COMPOUNDS				
ALDRIN	-	-	48	23
DIELDRIN	-	-	43J	66
4,4'-DDD (P,P'-DDD)	-	-	74	-
PCB-1242 (AROCLOR 1242)	-	-	1100	-
PCB-1260 (AROCLOR 1260)	-	-	350JN	-

- Material analyzed for but not detected above minimum quantitation limit
J Estimated value
N Presumptive evidence of presence of material

TABLE 6

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SUBSURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (ug/kg)	Background WH-SB-01	Onsite WH-SB-02	Downgradient WH-SB-03
EXTRACTABLE COMPOUNDS			
BENZO(B AND/OR K)FLUORANTHENE	-	170J	-
HEXADECANOIC ACID	5000JN	-	5000JN
OCTADECANOIC ACID	400JN	-	700JN
TETRADECANOIC ACID	-	-	200JN
PESTICIDE/PCB COMPOUNDS			
4,4'-DDT (P,P'-DDT)	-	8.1J	-

-     Material analyzed for but not detected above minimum quantitation limit

J   Estimated value

N   Presumptive evidence of presence of material

TABLE 7

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SEDIMENT SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (ug/kg)	Background	Downgradient
	WH-SD-01	WH-SD-02
EXTRACTABLE COMPOUNDS		
HEXADECANOIC ACID	2000JN	6000JN
OCTADECANOIC ACID	-	700JN
PETROLEUM PRODUCT	-	N

- \- Material analyzed for but not detected above minimum quantitation limit
- J Estimated value
- N Presumptive evidence of presence of material

5.0 SUMMARY

The operations at the WEC facility included manufacturing and repairing overhead distribution transformers, a process that has been conducted since 1958. The results of this investigation revealed the presence of organic and inorganic contaminants, consistent with the WEC operations, in surface soil samples in excess of background conditions. Access to the site could be obtained by nearby residents, and the uncontained contaminated surface soils could be dispersed by the wind. Potentially affected targets include employees at the WEC facility and adjacent industrial properties and the 486 residents residing within a 1-mile radius of the site. Also, the population within the 4-mile site radius is estimated at 49,884.

The results of sediment sampling at the confluence of the swampy region and the North Oconee River revealed the presence of ten inorganic contaminants with significantly higher concentrations than background conditions. Although there were no visibly discernable pathways for surface water migration from the landfill, contaminant migration from the site may be possible during heavy rainfall. One of the municipal surface water intakes for the city of Athens is located 2.65 stream miles from the WEC landfill. The municipal system serves approximately 98,800 persons. Other possible explanations for the presence of the inorganic contaminants could be infiltration of surface water runoff to groundwater or the influence of industrial properties located north and adjacent to the swampy region.

The groundwater pathway is not a concern due to the lack of potentially affected targets. However, because the potentially affected population is large for the surface water pathway, and there are potentially affected targets for the surface water, air and onsite pathways, FIT 4 recommends a Listing Site Inspection, Phase I, be conducted at the WEC landfill.

REFERENCES

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2. EPA Notification of Hazardous Waste Site (EPA Form 8900-1) for Westinghouse Electric Corporation, Athens, Clarke County, Georgia. Filed by E.J. Fogel, Plant Manager, December 13, 1988.

3. Samuel R. Pitts, Vice-President, Environmental Affairs, Westinghouse Electric Corporation, Pittsburg, Pennsylvania, letter to USEPA, December 20, 1988. Subject: EPA Notification of Hazardous Waste Site.

4. Will Slater, HWDMS, telephone conversation with R. Hoffmann, NUS Corporation, April 5, 1990. Subject: Interim status of WEC facility.

5. NUS Corporation Field Logbook No. F4-1378 for Westinghouse Electric Corporation, TDD No. F4-8903-40. Documentation of Screening Site Inspection, May 3-4, 1989.

6. Kenneth A. Lucas, "Preliminary Reassessment, Westinghouse Electric Corporation, Athens, Clarke County, Georgia," prepared for the Environmental Protection Agency, March 8, 1989.

7. Charles K. Gorham, Quality Assurance Supervisor, Westinghouse Electric Corporation, letter to George M. Saad, Environmental Engineer, Solid Waste Management Section, Georgia Environmental Protection Division, June 29, 1981. Subject: Liquid wastes generated at Westinghouse.

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10. U.S. Environmental Protection Agency, Graphical Exposure Modeling Systems (GEMS) Data Base, compiled from U.S. Bureau of the Census data (1980).

11. U.S. Department of Commerce, Climatic Atlas of the United States (Washington, D.C.: GPO, June 1968) Reprint: 1983, National Oceanic and Atmospheric Administration.

12. U.S. Department of Commerce, Monthly Normals of Temperature, Precipitation, and Heating and Cooling Degree Days 1951-80 in Georgia (National Climatic Center, Ashville, N.C. 1982), pp. 2, 5.

13. Dean B. Radtke, Charles W. Cressler, Howard A. Pearlman, Harry E. Blanebard, Jr., Keith W. McFadden, and Rebekah Brooks, Occurrence and Availability of Ground Water in the Athens Region, Northeastern Georgia, Water-Resources Investigations Report 86-4075 (U.S. Army Corps of Engineers, 1986), pp. 8-11, plate 1.

14. U.S. Department of Commerce, Rainfall Frequency Atlas of the United States, Technical Paper Number 40 (Washington, D.C.: GPO, 1961).

15. Rebecca Hoffmann, NUS Corporation; memo to file for Westinghouse Electric Corporation, August 12, 1989. Subject: Conversation with Roy Burns, Water Superintendent for Athens Water Department, concerning extent of water lines.

16. J.S. Clarke, S.A. Longsworth, C.N. Joiner, M.F. Peck, K.W. McFadden, and B.J. Milby, Groundwater Data for Georgia, Open File Report 87-367 (Georgia Department of Natural Resources Environmental Protection Division and Georgia Geologic Survey), pp. 4-5.

17. U.S. Geological Survey, National Water Summary: Hydrologic Events, Selected Water Quality Trends, and Ground-Water Resources, Water Supply Paper 2275 (1984), p. 162.

18. NUS Corporation Field Logbook No. F4-1377 for Westinghouse Electric Corporation, TDD No. F4-8904-04. Documentation of geophysical survey, May 3, 1989.

APPENDIX B

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1550 STOP: 00/00/00

ANALYTICAL RESULTS

MG/KG	
5.0U	SILVER
15U	ARSENIC
NA	BORON
26	BARIUM
2.5U	BERYLLIUM
2.5U	CADMIUM
5.0U	COBALT
29	CHROMIUM
34	COPPER
5.0U	MOLYBDENUM
14	NICKEL
29	LEAD
15U	ANTIMONY
20U	SELENIUM
12U	TIN
5.0U	STRONTIUM
25U	TELLURIUM
940	TITANIUM
50U	THALLIUM
120	VANADIUM
9.7	YTTRIUM
26	ZINC
NA	ZIRCONIUM
0.050U	MERCURY
27000	ALUMINUM
250	MANGANESE

ANALYTICAL RESULTS

MG/KG	
250U	CALCIUM
1100	MAGNESIUM
45000	IRON
500U	SODIUM
1100	POTASSIUM
22	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SD-01 BACKGROUND SEDIMENT SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1630 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
2.0U	SILVER
6.0U	ARSENIC
NA	BORON
21	BARIUM
1.0U	BERYLLIUM
1.0U	CADMIUM
2.0U	COBALT
15	CHROMIUM
3.9	COPPER
2.0U	MOLYBDENUM
4.0U	NICKEL
6.3	LEAD
6.0U	ANTIMONY
8.0U	SELENIUM
5.0U	TIN
2.0U	STRONTIUM
10U	TELLURIUM
410	TITANIUM
20U	THALLIUM
42	VANADIUM
7.1	YTTRIUM
12	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
4400	ALUMINUM
150	MANGANESE

MG/KG	ANALYTICAL RESULTS
150	CALCIUM
710	MAGNESIUM
16000	IRON
200U	SODIUM
820	POTASSIUM
20	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-01 BACKGROUND SURFACE SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START. 05/03/89 1530 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
3.0U	SILVER
9.0U	ARSENIC
NA	BORON
160	BARIUM
1.5U	BERYLLIUM
1.5U	CADMIUM
15	COBALT
14	CHROMIUM
7.5	COPPER
3.0U	MOLYBDENUM
6.0U	NICKEL
25	LEAD
9.0U	ANTIMONY
12U	SELENIUM
7.5U	TIN
3.0U	STRONTIUM
15U	TELLURIUM
1800	TITANIUM
30U	THALLIUM
61	VANADIUM
14	YTTRIUM
53	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
30000	ALUMINUM
800	MANGANESE

MG/KG	ANALYTICAL RESULTS
150U	CALCIUM
8300	MAGNESIUM
26000	IRON
300U	SODIUM
7800	POTASSIUM
19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34899 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-02 SUBSURFACE SOIL #2

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1005 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
7.0U	SILVER
21U	ARSENIC
NA	BORON
90	BARIUM
3.5U	BERYLLIUM
3.5U	CADMIUM
7.0U	COBALT
34	CHROMIUM
22	COPPER
7.0U	MOLYBDENUM
14U	NICKEL
42	LEAD
21U	ANTIMONY
28U	SELENIUM
18U	TIN
7.0U	STRONTIUM
35U	TELLURIUM
1900	TITANIUM
70U	THALLIUM
150	VANADIUM
7.0U	YTTRIUM
31	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
55000	ALUMINUM
310	MANGANESE

MG/KG	ANALYTICAL RESULTS
580	CALCIUM
2100	MAGNESIUM
53000	IRON
700U	SODIUM
2500	POTASSIUM
21	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SD-02 SEDIMENT SOIL #02

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1815 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
6.0U	SILVER
18U	ARSENIC
NA	BORON
180	BARIUM
3.0U	BERYLLIUM
3.0U	CADMIUM
18	COBALT
47	CHROMIUM
30	COPPER
6.0U	MOLYBDENUM
12U	NICKEL
45	LEAD
18U	ANTIMONY
24U	SELENIUM
15U	TIN
12	STRONTIUM
30U	TELLURIUM
1000	TITANIUM
60U	THALLIUM
120	VANADIUM
25	YTTRIUM
57	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
46000	ALUMINUM
4500	MANGANESE

MG/KG	ANALYTICAL RESULTS
1200	CALCIUM
1900	MAGNESIUM
50000	IRON
600U	SODIUM
1400	POTASSIUM
45	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-02 SURFACE SOIL #02

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1020 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
2.0U	SILVER
6.0U	ARSENIC
NA	BORON
92	BARIUM
1.0U	BERYLLIUM
1.0U	CADMIUM
5.9	COBALT
28	CHROMIUM
51	COPPER
2.0U	MOLYBDENUM
6.0	NICKEL
140	LEAD
6.0U	ANTIMONY
8.0U	SELENIUM
5.0U	TIN
8.2	STRONTIUM
10U	TELLURIUM
710	TITANIUM
20U	THALLIUM
43	VANADIUM
13	YTTRIUM
100	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
19000	ALUMINUM
320	MANGANESE

MG/KG	ANALYTICAL RESULTS
2200	CALCIUM
1900	MAGNESIUM
14000	IRON
200U	SODIUM
1800	POTASSIUM
13	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

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** PROJECT NO. 89-400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SB-03 SUBSURFACE SOIL #03 COLLECTION START: 05/04/89 1225 STOP: 00/00/00 **

*** ***

MG/KG	ANALYTICAL RESULTS
5.0U	SILVER
15U	ARSENIC
NA	BORON
60	BARIUM
2.5U	BERYLLIUM
2.5U	CADMIUM
15	COBALT
56	CHROMIUM
13	COPPER
5.0U	MOLYBDENUM
11	NICKEL
21	LEAD
15U	ANTIMONY
20U	SELENIUM
12U	TIN
5.0U	STRONTIUM
25U	TELLURIUM
1200	TITANIUM
50U	THALLIUM
81	VANADIUM
5.0U	YTTRIUM
40	ZINC
NA	ZIRCONIUM
0.1	MERCURY
50000	ALUMINUM
1300	MANGANESE

MG/KG	ANALYTICAL RESULTS
290	CALCIUM
1200	MAGNESIUM
34000	IRON
500U	SODIUM
1200	POTASSIUM
19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-03 SURFACE SOIL #03 COLLECTION START: 05/04/89 1035 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
50U	SILVER
150U	ARSENIC
NA	BORON
130	BARIUM
25U	BERYLLIUM
25U	CADMIUM
50U	COBALT
2400	CHROMIUM
23000	COPPER
50U	MOLYBDENUM
100U	NICKEL
10000	LEAD
150U	ANTIMONY
200U	SELENIUM
120U	TIN
50U	STRONTIUM
250U	TELLURIUM
1100	TITANIUM
500U	THALLIUM
70	VANADIUM
50U	YTTRIUM
3000	ZINC
NA	ZIRCONIUM
0.05	MERCURY
28000	ALUMINUM
500	MANGANESE

MG/KG	ANALYTICAL RESULTS
2500U	CALCIUM
3500	MAGNESIUM
29000	IRON
5000U	SODIUM
10000U	POTASSIUM
33	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-04 SURFACE SOIL #04 COLLECTION START: 05/04/89 1120 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
25U	SILVER
75U	ARSENIC
NA	BORON
9000	BARIUM
12U	BERYLLIUM
12U	CADMIUM
55	COBALT
8700	CHROMIUM
9900	COPPER
25U	MOLYBDENUM
58	NICKEL
9000	LEAD
100	ANTIMONY
100U	SELENIUM
62U	TIN
120	STRONTIUM
120U	TELLURIUM
170	TITANIUM
250U	THALLIUM
46	VANADIUM
25U	YTTRIUM
10000	ZINC
NA	ZIRCONIUM
0.10	MERCURY
18000	ALUMINUM
210	MANGANESE

MG/KG	ANALYTICAL RESULTS
1800	CALCIUM
1000	MAGNESIUM
29000	IRON
2500U	SODIUM
5000U	POTASSIUM
29	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-01 BACKGROUND SURFACE SOIL COLLECTION START: 05/03/89 1530 STOP: 00/00/00

RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-02 SURFACE SOIL #02 COLLECTION START: 05/04/89 1020 STOP: 00/00/00

RESULTS	UNITS	PARAMETER
0.25	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 89-400    SAMPLE NO. 34901  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R YOUNG              **
**   SOURCE: WESTINGHOUSE ELECT.                                      CITY: ATHENS              ST: GA                    **
**   STATION ID: SS-03 SURFACE SOIL #03                               COLLECTION START: 05/04/89  1035   STOP: 00/00/00   **
**                                                                                                                        **
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RESULTS	UNITS	PARAMETER
0.30U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 89-400    SAMPLE NO. 34902  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R YOUNG              **
**   SOURCE: WESTINGHOUSE ELECT.                                      CITY: ATHENS                ST: GA                  **
**   STATION ID: SS-04 SURFACE SOIL #04                               COLLECTION START: 05/04/89  1120   STOP: 00/00/00   **
**                                                                                                                        **
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RESULTS	UNITS	PARAMETER
1.2	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

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** PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL COLLECTION START: 05/03/89 1550 STOP: 00/00/00 **
** **
*** ***

RESULTS	UNITS	PARAMETER
0.26U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34899 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SB-02 SUBSURFACE SOIL #2 COLLECTION START: 05/04/89 1005 STOP: 00/00/00 **
** **
*** ***

RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-03 SUBSURFACE SOIL #03 COLLECTION START: 05/04/89 1225 STOP: 00/00/00

RESULTS	UNITS	PARAMETER
0.33	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL
PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT
CITY: ATHENS ST: GA
STATION ID: SD-01 BACKGROUND SEDIMENT SOIL
COLLECTION START: 05/03/89 1630 STOP: 00/00/00

RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT
STATION ID: SD-02 SEDIMENT SOIL #02

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1815 STOP: 00/00/00

RESULTS	UNITS	PARAMETER
0.36U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 06/13/89

PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-01 BACKGROUND SURFACE SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1530 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
39U	CHLOROMETHANE
39U	VINYL CHLORIDE
39U	BROMOMETHANE
39U	CHLOROETHANE
39U	TRICHLOROFLUOROMETHANE
39U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
390U	ACETONE
390U	CARBON DISULFIDE
39U	METHYLENE CHLORIDE
39U	TRANS-1,2-DICHLOROETHENE
39U	1,1-DICHLOROETHANE
390U	VINYL ACETATE
39U	CIS-1,2-DICHLOROETHENE
39U	2,2-DICHLOROPROPANE
390U	METHYL ETHYL KETONE
39U	BROMOCHLOROMETHANE
39U	CHLOROFORM
39U	1,1,1-TRICHLOROETHANE
39U	1,1 DICHLOROPROPENE
39U	CARBON TETRACHLORIDE
39U	1,2-DICHLOROETHANE
39U	BENZENE
39U	TRICHLOROETHENE(TRICHLOROETHYLENE)
39U	1,2-DICHLOROPROPANE
39U	DIBROMOMETHANE
39U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
39U	CIS 1,3-DICHLOROPROPENE
390U	METHYL ISOBUTYL KETONE
39U	TOLUENE
39U	TRANS-1,3 DICHLOROPROPENE
39U	1,1,2-TRICHLOROETHANE
39U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
39U	1,3-DICHLOROPROPANE
390U	METHYL BUTYL KETONE
39U	DIBROMOCHLOROMETHANE
39U	CHLOROBENZENE
39U	1,1,1,2-TETRACHLOROETHANE
39U	ETHYL BENZENE
39U	(M- AND/OR P-)XYLENE
39U	O-XYLENE
39U	STYRENE
39U	BROMOFORM
39U	BROMOBENZENE
39U	1,1,2,2-TETRACHLOROETHANE
39U	1,2,3-TRICHLOROPROPANE
39U	O-CHLOROTOLUENE
39U	P-CHLOROTOLUENE
39U	1,3-DICHLOROBENZENE
39U	1,4-DICHLOROBENZENE
39U	1,2-DICHLOROBENZENE
19.0	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 05/30/89

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-02 SURFACE SOIL #02 COLLECTION START: 05/04/89 1020 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
41U	CHLOROMETHANE	41U	CIS-1,3-DICHLOROPROPENE
41U	VINYL CHLORIDE	410U	METHYL ISOBUTYL KETONE
41U	BROMOMETHANE	41U	TOLUENE
41U	CHLOROETHANE	41U	TRANS-1,3-DICHLOROPROPENE
41U	TRICHLOROFLUOROMETHANE	41U	1,1,2-TRICHLOROETHANE
41U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	41U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
410U	ACETONE	41U	1,3-DICHLOROPROPANE
410U	CARBON DISULFIDE	410U	METHYL BUTYL KETONE
41U	METHYLENE CHLORIDE	41U	DIBROMOCHLOROMETHANE
41U	TRANS-1,2-DICHLOROETHENE	41U	CHLOROBENZENE
41U	1,1-DICHLOROETHANE	41U	1,1,1,2-TETRACHLOROETHANE
410U	VINYL ACETATE	41U	ETHYL BENZENE
41U	CIS-1,2-DICHLOROETHENE	41U	(M- AND/OR P-)XYLENE
41U	2,2-DICHLOROPROPANE	41U	O-XYLENE
410U	METHYL ETHYL KETONE	41U	STYRENE
41U	BROMOCHLOROMETHANE	41U	BROMOFORM
41U	CHLOROFORM	41U	BROMOBENZENE
41U	1,1,1-TRICHLOROETHANE	41U	1,1,2,2-TETRACHLOROETHANE
41U	1,1-DICHLOROPROPENE	41U	1,2,3-TRICHLOROPROPANE
41U	CARBON TETRACHLORIDE	41U	O-CHLOROTOLUENE
41U	1,2-DICHLOROETHANE	41U	P-CHLOROTOLUENE
41U	BENZENE	41U	1,3-DICHLOROBENZENE
41U	TRICHLOROETHENE(TRICHLOROETHYLENE)	41U	1,4-DICHLOROBENZENE
41U	1,2-DICHLOROPROPANE	41U	1,2-DICHLOROBENZENE
41U	DIBROMOMETHANE	14.0	PERCENT MOISTURE
41U	BROMODICHLOROMETHANE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 05/30/89

PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-03 SURFACE SOIL #03 COLLECTION START: 05/04/89 1035 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
160U	CHLOROMETHANE
160U	VINYL CHLORIDE
160U	BROMOMETHANE
160U	CHLOROETHANE
160U	TRICHLOROFLUOROMETHANE
160U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
1600U	ACETONE
1600U	CARBON DISULFIDE
160U	METHYLENE CHLORIDE
160U	TRANS-1,2-DICHLOROETHENE
160U	1,1-DICHLOROETHANE
1600U	VINYL ACETATE
160U	CIS-1,2-DICHLOROETHENE
160U	2,2-DICHLOROPROPANE
1600U	METHYL ETHYL KETONE
160U	BROMOCHLOROMETHANE
160U	CHLOROFORM
160U	1,1,1-TRICHLOROETHANE
160U	1,1-DICHLOROPROPENE
160U	CARBON TETRACHLORIDE
160U	1,2-DICHLOROETHANE
160U	BENZENE
160U	TRICHLOROETHENE(TRICHLOROETHYLENE)
160U	1,2-DICHLOROPROPANE
160U	DIBROMOMETHANE
160U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
160U	CIS-1,3-DICHLOROPROPENE
1600U	METHYL ISOBUTYL KETONE
160U	TOLUENE
160U	TRANS-1,3-DICHLOROPROPENE
160U	1,1,2-TRICHLOROETHANE
160U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
160U	1,3-DICHLOROPROPANE
1600U	METHYL BUTYL KETONE
160U	DIBROMOCHLOROMETHANE
160U	CHLOROBENZENE
160U	1,1,1,2-TETRACHLOROETHANE
160U	ETHYL BENZENE
160U	(M- AND/OR P-)XYLENE
81J	O-XYLENE
160U	STYRENE
160U	BROMOFORM
160U	BROMOBENZENE
160U	1,1,2,2-TETRACHLOROETHANE
160U	1,2,3-TRICHLOROPROPANE
160U	O-CHLOROTOLUENE
160U	P-CHLOROTOLUENE
160U	1,3-DICHLOROBENZENE
160U	1,4-DICHLOROBENZENE
160U	1,2-DICHLOROBENZENE
33.0	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/30/89

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SS-03 SURFACE SOIL #03 COLLECTION START: 05/04/89 1035 STOP: 00/00/00 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

200JN	TRIMETHYLBENZENE
N	PETROLEUM PRODUCT

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

PURGEABLE ORGANICS DATA REPORT

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/13/89

PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-04 SURFACE SOIL #04

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1120 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
930000U	CHLOROMETHANE
930000U	VINYL CHLORIDE
930000U	BROMOMETHANE
930000U	CHLOROETHANE
930000U	TRICHLOROFLUOROMETHANE
930000U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
9.3E6U	ACETONE
9.3E6U	CARBON DISULFIDE
930000U	METHYLENE CHLORIDE
930000U	TRANS-1,2-DICHLOROETHENE
930000U	1,1-DICHLOROETHANE
9.3E6U	VINYL ACETATE
930000U	CIS-1,2-DICHLOROETHENE
930000U	2,2-DICHLOROPROPANE
9.3E6U	METHYL ETHYL KETONE
930000U	BROMOCHLOROMETHANE
930000U	CHLOROFORM
930000U	1,1,1-TRICHLOROETHANE
930000U	1,1 DICHLOROPROPENE
930000U	CARBON TETRACHLORIDE
930000U	1,2-DICHLOROETHANE
930000U	BENZENE
930000U	TRICHLOROETHENE(TRICHLOROETHYLENE)
930000U	1,2-DICHLOROPROPANE
930000U	DIBROMOMETHANE
930000U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
930000U	CIS 1,3-DICHLOROPROPENE
9.3E6U	METHYL ISOBUTYL KETONE
930000U	TOLUENE
930000U	TRANS-1,3 DICHLOROPROPENE
930000U	1,1,2-TRICHLOROETHANE
930000U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
930000U	1,3-DICHLOROPROPANE
9.3E6U	METHYL BUTYL KETONE
930000U	DIBROMOCHLOROMETHANE
930000U	CHLOROBENZENE
1.9E6U	1,1,1,2-TETRACHLOROETHANE
1.1E6	ETHYL BENZENE
1.7E7	(M- AND/OR P-)XYLENE
5.4E6	O-XYLENE
1.9E6U	STYRENE
930000U	BROMOFORM
1.9E6U	BROMOBENZENE
930000U	1,1,2,2-TETRACHLOROETHANE
1.9E6U	1,2,3-TRICHLOROPROPANE
1.9E6U	O-CHLOROTOLUENE
1.9E6U	P-CHLOROTOLUENE
1.9E6U	1,3-DICHLOROBENZENE
1.9E6U	1,4-DICHLOROBENZENE
1.9E6U	1,2-DICHLOROBENZENE
40.0	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/13/89

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SS-04 SURFACE SOIL #04 COLLECTION START: 05/04/89 1120 STOP: 00/00/00 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

5E6JN	TRIMETHYLBENZENE (3 ISOMERS)

FOOTNOTES
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*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-01 BACKGROUND SURFACE SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1530 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
1700U	BIS(2 CHLOROETHYL) ETHER	1700U	FLUORANTHENE
1700U	BIS(2-CHLOROISOPROPYL) ETHER	1700U	PYRENE
1700U	N-NITROSODI-N-PROPYLAMINE	1700U	BENZYL BUTYL PHTHALATE
1700U	HEXACHLOROETHANE	1700U	3,3'-DICHLOROBENZIDINE
1700U	NITROBENZENE	1700U	BENZO(A)ANTHRACENE
1700U	ISOPHORONE	1700U	CHRYSENE
1700U	BIS(2-CHLOROETHOXY) METHANE	1700U	BIS(2-ETHYLHEXYL) PHTHALATE
1700U	1,2,4-TRICHLOROBENZENE	1700U	DI-N-OCTYLPHTHALATE
1700U	NAPHTHALENE	1700U	BENZO(B AND/OR K)FLUORANTHENE
1700U	4-CHLOROANILINE	1700U	BENZO-A-PYRENE
1700U	HEXACHLOROBUTADIENE	1700U	INDENO (1,2,3-CD) PYRENE
1700U	2-METHYLNAPHTHALENE	1700U	DIBENZO(A,H)ANTHRACENE
1700U	HEXACHLOROCYCLOPENTADIENE (HCCP)	1700U	BENZO(GHI)PERYLENE
1700U	2-CHLORONAPHTHALENE	1700U	PHENOL
1700U	2-NITROANILINE	1700U	2-CHLOROPHENOL
1700U	DIMETHYL PHTHALATE	3300U	BENZYL ALCOHOL
1700U	ACENAPHTHYLENE	1700U	2-METHYLPHENOL
1700U	2,6-DINITROTOLUENE	1700U	(3-AND/OR 4-)METHYLPHENOL
1700U	3-NITROANILINE	1700U	2-NITROPHENOL
1700U	ACENAPHTHENE	1700U	2,4-DIMETHYLPHENOL
1700U	DIBENZOFURAN	3300U	BENZOIC ACID
1700U	2,4-DINITROTOLUENE	1700U	2,4-DICHLOROPHENOL
1700U	DIETHYL PHTHALATE	1700U	4-CHLORO-3-METHYLPHENOL
1700U	FLUORENE	1700U	2,4,6-TRICHLOROPHENOL
1700U	4-CHLOROPHENYL PHENYL ETHER	1700U	2,4,5-TRICHLOROPHENOL
1700U	4-NITROANILINE	3300U	2,4-DINITROPHENOL
1700U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE	3300U	4-NITROPHENOL
1700U	4-BROMOPHENYL PHENYL ETHER	1700U	2,3,4,6-TETRACHLOROPHENOL
1700U	HEXACHLOROBENZENE (HCB)	3300U	2-METHYL-4,6-DINITROPHENOL
1700U	PHENANTHRENE	3300U	PENTACHLOROPHENOL
1700U	ANTHRACENE	19	PERCENT MOISTURE
1700U	DI-N-BUTYLPHTHALATE		

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO  89-400    SAMPLE NO. 34904  SAMPLE TYPE: SOIL       PROG ELEM: NSF   COLLECTED BY: R YOUNG                     **
**   SOURCE: WESTINGHOUSE ELECT.                                     CITY: ATHENS                 ST: GA                        **
**   STATION ID: SS-01 BACKGROUND SURFACE SOIL                       COLLECTION START: 05/03/89  1530   STOP: 00/00/00          **
**                                                                                                                              **
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ANALYTICAL RESULTS UG/KG

1000JN   HEXADECANOIC ACID

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 06/08/89

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-02 SURFACE SOIL #02

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1020 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
16000U	BIS(2-CHLOROETHYL) ETHER
16000U	BIS(2-CHLOROISOPROPYL) ETHER
16000U	N-NITROSODI-N-PROPYLAMINE
16000U	HEXACHLOROETHANE
16000U	NITROBENZENE
16000U	ISOPHORONE
16000U	BIS(2-CHLOROETHOXY) METHANE
16000U	1,2,4-TRICHLOROBENZENE
16000U	NAPHTHALENE
16000U	4-CHLOROANILINE
16000U	HEXACHLOROBUTADIENE
16000U	2-METHYLNAPHTHALENE
16000U	HEXACHLOROCYCLOPENTADIENE (HCCP)
16000U	2-CHLORONAPHTHALENE
16000U	2-NITROANILINE
16000U	DIMETHYL PHTHALATE
2800J	ACENAPHTHYLENE
16000U	2,6-DINITROTOLUENE
16000U	3-NITROANILINE
16000U	ACENAPHTHENE
16000U	DIBENZOFURAN
16000U	2,4-DINITROTOLUENE
16000U	DIETHYL PHTHALATE
16000U	FLUORENE
16000U	4-CHLOROPHENYL PHENYL ETHER
16000U	4-NITROANILINE
16000U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
16000U	4-BROMOPHENYL PHENYL ETHER
16000U	HEXACHLOROBENZENE (HCB)
16000	PHENANTHRENE
5200J	ANTHRACENE
16000U	DI-N-BUTYLPHTHALATE
78000	FLUORANTHENE
67000	PYRENE
16000U	BENZYL BUTYL PHTHALATE
16000U	3,3'-DICHLOROBENZIDINE
28000	BENZO(A)ANTHRACENE
25000	CHRYSENE
16000U	BIS(2-ETHYLHEXYL) PHTHALATE
16000U	DI-N-OCTYLPHTHALATE
51000	BENZO(B AND/OR K)FLUORANTHENE
24000	BENZO-A-PYRENE
10000J	INDENO (1,2,3-CD) PYRENE
3700J	DIBENZO(A,H)ANTHRACENE
9500J	BENZO(GHI)PERYLENE
16000U	PHENOL
16000U	2-CHLOROPHENOL
31000U	BENZYL ALCOHOL
16000U	2-METHYLPHENOL
16000U	(3-AND/OR 4-)METHYLPHENOL
16000U	2-NITROPHENOL
16000U	2,4-DIMETHYLPHENOL
31000U	BENZOIC ACID
16000U	2,4-DICHLOROPHENOL
16000U	4-CHLORO-3-METHYLPHENOL
16000U	2,4,6-TRICHLOROPHENOL
16000U	2,4,5-TRICHLOROPHENOL
31000U	2,4-DINITROPHENOL
31000U	4-NITROPHENOL
16000U	2,3,4,6-TETRACHLOROPHENOL
31000U	2-METHYL-4,6-DINITROPHENOL
31000U	PENTACHLOROPHENOL
14	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT CITY: ATHENS ST: GA
STATION ID: SS-02 SURFACE SOIL #02 COLLECTION START: 05/04/89 1020 STOP: 00/00/00

ANALYTICAL RESULTS UG/KG

2000JN	(DIMETHYLBUTENYLIDENE)BISBENZENE
2000JN	METHYLPHENANTHRENE
6000JN	CYCLOPENTAPHENANTHRENE
3000JN	PHENYLNAPHTHALENE
2000JN	BIS(BUTADIYNEDIYL)BENZENE
9000JN	BENZONAPHTHOFURAN (3 ISOMERS)
3000JN	PHENANTHRENECARBONITRILE
20000JN	METHYLFLUORANTHENE (4 ISOMERS)
8000JN	BENZOFLUORENE
7000JN	BENZONAPHTHOTHIOPHENE
40000JN	BENZOFLUORANTHENE (NOT B OR K) (2 ISOMERS)
200000J	2 UNIDENTIFIED COMPOUNDS
2000JN	BENZOPHENANTHRENONE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-03 SURFACE SOIL #03

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1035 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
20000U	BIS(2 CHLOROETHYL) ETHER
20000U	BIS(2-CHLOROISOPROPYL) ETHER
20000U	N-NITROSODI-N-PROPYLAMINE
20000U	HEXACHLOROETHANE
20000U	NITROBENZENE
20000U	ISOPHORONE
20000U	BIS(2-CHLOROETHOXY) METHANE
20000U	1,2,4-TRICHLOROBENZENE
20000U	NAPHTHALENE
20000U	4-CHLOROANILINE
20000U	HEXACHLOROBUTADIENE
20000U	2-METHYLNAPHTHALENE
20000U	HEXACHLOROCYCLOPENTADIENE (HCCP)
20000U	2-CHLORONAPHTHALENE
20000U	2-NITROANILINE
20000U	DIMETHYL PHTHALATE
20000U	ACENAPHTHYLENE
20000U	2,6-DINITROTOLUENE
20000U	3-NITROANILINE
20000U	ACENAPHTHENE
20000U	DIBENZOFURAN
20000U	2,4-DINITROTOLUENE
20000U	DIETHYL PHTHALATE
20000U	FLUORENE
20000U	4-CHLOROPHENYL PHENYL ETHER
20000U	4-NITROANILINE
20000U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20000U	4-BROMOPHENYL PHENYL ETHER
20000U	HEXACHLOROBENZENE (HCB)
20000U	PHENANTHRENE
20000U	ANTHRACENE
20000U	DI-N-BUTYLPHTHALATE

UG/KG	ANALYTICAL RESULTS
20000U	FLUORANTHENE
20000U	PYRENE
20000U	BENZYL BUTYL PHTHALATE
20000U	3,3'-DICHLOROBENZIDINE
20000U	BENZO(A)ANTHRACENE
20000U	CHRYSENE
20000U	BIS(2-ETHYLHEXYL) PHTHALATE
20000U	DI-N-OCTYLPHTHALATE
20000U	BENZO(B AND/OR K)FLUORANTHENE
20000U	BENZO-A-PYRENE
20000U	INDENO (1,2,3-CD) PYRENE
20000U	DIBENZO(A,H)ANTHRACENE
20000U	BENZO(GHI)PERYLENE
20000U	PHENOL
20000U	2-CHLOROPHENOL
40000U	BENZYL ALCOHOL
20000U	2-METHYLPHENOL
20000U	(3-AND/OR 4-)METHYLPHENOL
20000U	2-NITROPHENOL
20000U	2,4-DIMETHYLPHENOL
40000U	BENZOIC ACID
20000U	2,4-DICHLOROPHENOL
20000U	4-CHLORO-3-METHYLPHENOL
20000U	2,4,6-TRICHLOROPHENOL
20000U	2,4,5-TRICHLOROPHENOL
40000U	2,4-DINITROPHENOL
40000U	4-NITROPHENOL
20000U	2,3,4,6-TETRACHLOROPHENOL
40000U	2-METHYL-4,6-DINITROPHENOL
40000U	PENTACHLOROPHENOL
33	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-03 SURFACE SOIL #03

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1035 STOP: 00/00/00

ANALYTICAL RESULTS UG/KG

5000JN	METHYLPROPYLBENZENE
9000JN	DIETHYLMETHYLBENZENE (2 ISOMERS)
6000JN	(DIMETHYLPROPYL)BENZENE
10000JN	DIMETHYL(METHYLETHYL)BENZENE (2 ISOMERS)
4000JN	ETHYLTRIMETHYLBENZENE
6000JN	HEXANOIC ACID
3000JN	COPAENE
40000JN	HEPTADECANOL (2 ISOMERS)
200000JN	TETRADECANOIC ACID
40000JN	PENTADECANOIC ACID
40000JN	TETRADECANAL
2E6JN	HEXADECANOIC ACID
2E6J	11 UNIDENTIFIED COMPOUNDS
100000JN	HEPTADECANOIC ACID
700000JN	OCTADECANOIC ACID
N	PETROLEUM PRODUCT
40000JN	ETHYLDIMETHYLBENZENE (5 ISOMERS)

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-04 SURFACE SOIL #04

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1120 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
88000U	BIS(2 CHLOROETHYL) ETHER	88000U	FLUORANTHENE
88000U	BIS(2-CHLOROISOPROPYL) ETHER	88000U	PYRENE
88000U	N-NITROSODI-N-PROPYLAMINE	88000U	BENZYL BUTYL PHTHALATE
88000U	HEXACHLOROETHANE	88000U	3,3'-DICHLOROBENZIDINE
88000U	NITROBENZENE	88000U	BENZO(A)ANTHRACENE
88000U	ISOPHORONE	88000U	CHRYSENE
88000U	BIS(2-CHLOROETHOXY) METHANE	88000U	BIS(2-ETHYLHEXYL) PHTHALATE
88000U	1,2,4-TRICHLOROBENZENE	88000U	DI-N-OCTYLPHTHALATE
620000	NAPHTHALENE	88000U	BENZO(B AND/OR K)FLUORANTHENE
88000U	4-CHLOROANILINE	88000U	BENZO-A-PYRENE
88000U	HEXACHLOROBUTADIENE	88000U	INDENO (1,2,3-CD) PYRENE
240000	2-METHYLNAPHTHALENE	88000U	DIBENZO(A,H)ANTHRACENE
88000U	HEXACHLOROCYCLOPENTADIENE (HCCP)	88000U	BENZO(GHI)PERYLENE
88000U	2-CHLORONAPHTHALENE	88000U	PHENOL
88000U	2-NITROANILINE	88000U	2-CHLOROPHENOL
88000U	DIMETHYL PHTHALATE	180000U	BENZYL ALCOHOL
88000U	ACENAPHTHYLENE	88000U	2-METHYLPHENOL
88000U	2,6-DINITROTOLUENE	88000U	(3-AND/OR 4-)METHYLPHENOL
88000U	3-NITROANILINE	88000U	2-NITROPHENOL
88000U	ACENAPHTHENE	88000U	2,4-DIMETHYLPHENOL
88000U	DIBENZOFURAN	180000U	BENZOIC ACID
88000U	2,4-DINITROTOLUENE	88000U	2,4-DICHLOROPHENOL
88000U	DIETHYL PHTHALATE	88000U	4-CHLORO-3-METHYLPHENOL
88000U	FLUORENE	88000U	2,4,6-TRICHLOROPHENOL
88000U	4-CHLOROPHENYL PHENYL ETHER	88000U	2,4,5-TRICHLOROPHENOL
88000U	4-NITROANILINE	180000	2,4-DINITROPHENOL
88000U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE	180000	4-NITROPHENOL
88000U	4-BROMOPHENYL PHENYL ETHER	88000U	2,3,4,6-TETRACHLOROPHENOL
88000U	HEXACHLOROBENZENE (HCB)	180000U	2-METHYL-4,6-DINITROPHENOL
13000J	PHENANTHRENE	180000U	PENTACHLOROPHENOL
88000U	ANTHRACENE	40	PERCENT MOISTURE
88000U	DI-N-BUTYLPHTHALATE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-04 SURFACE SOIL #04 COLLECTION START: 05/04/89 1120 STOP: 00/00/00

ANALYTICAL RESULTS UG/KG

10000JN	PROPYLCYCLOHEXANE
30000JN	PROPYLBENZENE
200000JN	ETHYLMETHYLBENZENE (3 ISOMERS)
900000JN	TRIMETHYLBENZENE (3 ISOMERS)
N	PETROLEUM PRODUCT
20000JN	(METHYLPROPYL)BENZENE
200000JN	PROPENYLCYCLOHEXANE
100000JN	DIHYDROINDENE
900000JN	METHYLPROPYLBENZENE
600000JN	BUTYLBENZENE
6E6JN	ETHYLDIMETHYLBENZENE (7 ISOMERS)
1E6JN	(DIMETHYLPROPYL)BENZENE (6 ISOMERS)
100000JN	DIETHYLMETHYLBENZENE
20000JN	METHYLDECAHYDRONAPHTHALENE
30000JN	PENTYLCYCLOHEXANE
700000JN	METHYLDIHYDROINDENE
1E6JN	DIMETHYL(METHYLETHYL)BENZENE (6 ISOMERS)
1E6JN	DIETHYLBENZENE
2E6J	10 UNIDENTIFIED COMPOUNDS
200000JN	TETRAHYDRONAPHTHALENE
100000JN	[(METHYLBENZYL)SULFONYL]PHENOL
200000JN	DIMETHYLDIHYDROINDENE (2 ISOMERS)
90000JN	DIMETHYL(METHYLPROPYL)BENZENE (2 ISOMERS)
100000JN	ETHYLTRIMETHYLBENZENE
60000JN	1-METHYLNAPHTHALENE
20000JN	DIMETHYLNAPHTHALENE
100000JN	HEXAMETHYLOCTAHYDROINDENE
100000JN	BIS(DIMETHYLETHYL)METHYLPHENOL
20000JN	TRIMETHYLNAPATHALENE (2 ISOMERS)
30000JN	METHYL(METHYLETHYL)NAPHTHALENE
200000JN	TETRADECANOIC ACID
30000JN	DIMETHYLPHENANTHRENE
1E6JN	HEXADECENOIC ACID
4E6JN	HEXADECANOIC ACID
1E6JN	OCTADECANOIC ACID
2E6JN	ETHYL(METHYLETHYL)BENZENE
50000JN	METHYLPROPYLCYCLOHEXANE (2 ISOMERS)

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-01 BACKGROUND SURFACE SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1530 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
8.1UJ	ALDRIN
8.1UJ	HEPTACHLOR
8.1UJ	HEPTACHLOR EPOXIDE
8.1UJ	ALPHA-BHC
8.1UJ	BETA-BHC
8.1UJ	GAMMA BHC (LINDANE)
8.1UJ	DELTA-BHC
8.1UJ	ENDOSULFAN I (ALPHA)
8.1UJ	DIELDRIN
8.1UJ	4,4'-DDT (P,P'-DDT)
8.1UJ	4,4'-DDE (P,P'-DDE)
8.1UJ	4,4'-DDD (P,P'-DDD)
8.1UJ	ENDRIN
8.1UJ	ENDOSULFAN II (BETA)
8.1UJ	ENDOSULFAN SULFATE
42UJ	CHLORDANE (TECH. MIXTURE) /1
62UJ	PCB-1242 (AROCLOR 1242)
62UJ	PCB-1254 (AROCLOR 1254)
62UJ	PCB-1221 (AROCLOR 1221)

UG/KG	ANALYTICAL RESULTS
62UJ	PCB-1232 (AROCLOR 1232)
62UJ	PCB-1248 (AROCLOR 1248)
62UJ	PCB-1260 (AROCLOR 1260)
62UJ	PCB-1016 (AROCLOR 1016)
310UJ	TOXAPHENE
---	CHLORDENE /2
---	ALPHA-CHLORDENE /2
---	BETA CHLORDENE /2
---	GAMMA-CHLORDENE /2
---	1-HYDROXYCHLORDENE /2
---	GAMMA-CHLORDANE /2
---	TRANS-NONACHLOR /2
---	ALPHA-CHLORDANE /2
---	CIS-NONACHLOR /2
---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
19UJ	METHOXYCHLOR
8.1UJ	ENDRIN KETONE
19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-02 SURFACE SOIL #02 COLLECTION START: 05/04/89 1020 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
22U	ALDRIN	210U	PCB-1232 (AROCLOR 1232)
22U	HEPTACHLOR	210U	PCB-1248 (AROCLOR 1248)
22U	HEPTACHLOR EPOXIDE	210U	PCB-1260 (AROCLOR 1260)
22U	ALPHA-BHC	210U	PCB-1016 (AROCLOR 1016)
22U	BETA-BHC	1400U	TOXAPHENE
22U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
22U	DELTA-BHC	---	ALPHA-CHLORDENE /2
22U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
50U	DIELDRIN	---	GAMMA-CHLORDENE /2
22U	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
22U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
22U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
22U	ENDRIN	---	ALPHA-CHLORDANE /2
22U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
310U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
97U	CHLORDANE (TECH. MIXTURE) /1	79U	METHOXYCHLOR
210U	PCB-1242 (AROCLOR 1242)	33U	ENDRIN KETONE
210U	PCB-1254 (AROCLOR 1254)	14	PERCENT MOISTURE
210U	PCB-1221 (AROCLOR 1221)		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-03 SURFACE SOIL #03

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1035 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
48	ALDRIN
86U	HEPTACHLOR
28U	HEPTACHLOR EPOXIDE
28U	ALPHA-BHC
160U	BETA-BHC
44U	GAMMA-BHC (LINDANE)
28U	DELTA-BHC
60U	ENDOSULFAN I (ALPHA)
43J	DIELDRIN
28U	4,4'-DDT (P,P'-DDT)
66U	4,4'-DDE (P,P'-DDE)
74	4,4'-DDD (P,P'-DDD)
48U	ENDRIN
48U	ENDOSULFAN II (BETA)
48U	ENDOSULFAN SULFATE
250U	CHLORDANE (TECH. MIXTURE) /1
1100	PCB-1242 (AROCLOR 1242)
300U	PCB-1254 (AROCLOR 1254)
1000U	PCB-1221 (AROCLOR 1221)

UG/KG	ANALYTICAL RESULTS
1000U	PCB-1232 (AROCLOR 1232)
1000U	PCB-1248 (AROCLOR 1248)
350JN	PCB-1260 (AROCLOR 1260)
1000U	PCB-1016 (AROCLOR 1016)
1500U	TOXAPHENE
---	CHLORDENE /2
---	ALPHA-CHLORDENE /2
---	BETA CHLORDENE /2
---	GAMMA-CHLORDENE /2
---	1-HYDROXYCHLORDENE /2
---	GAMMA-CHLORDANE /2
---	TRANS-NONACHLOR /2
---	ALPHA-CHLORDANE /2
---	CIS-NONACHLOR /2
---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
68U	METHOXYCHLOR
28U	ENDRIN KETONE
33	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-04 SURFACE SOIL #04

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1120 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
23	ALDRIN
33U	HEPTACHLOR
41U	HEPTACHLOR EPOXIDE
41U	ALPHA-BHC
41U	BETA-BHC
41U	GAMMA BHC (LINDANE)
41U	DELTA-BHC
41U	ENDOSULFAN I (ALPHA)
66	DIELDRIN
79U	4,4'-DDT (P,P'-DDT)
94U	4,4'-DDE (P,P'-DDE)
79U	4,4'-DDD (P,P'-DDD)
79U	ENDRIN
79U	ENDOSULFAN II (BETA)
150U	ENDOSULFAN SULFATE
220U	CHLORDANE (TECH. MIXTURE) /1
440U	PCB-1242 (AROCLOR 1242)
440U	PCB-1254 (AROCLOR 1254)
440U	PCB-1221 (AROCLOR 1221)

UG/KG	ANALYTICAL RESULTS
440U	PCB-1232 (AROCLOR 1232)
440U	PCB-1248 (AROCLOR 1248)
440U	PCB-1260 (AROCLOR 1260)
440U	PCB-1016 (AROCLOR 1016)
1600U	TOXAPHENE
---	CHLORDENE /2
---	ALPHA-CHLORDENE /2
---	BETA CHLORDENE /2
---	GAMMA-CHLORDENE /2
---	1-HYDROXYCHLORDENE /2
---	GAMMA-CHLORDANE /2
---	TRANS-NONACHLOR /2
---	ALPHA-CHLORDANE /2
---	CIS-NONACHLOR /2
---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
250U	METHOXYCHLOR
100U	ENDRIN KETONE
40	PERCENT MOISTURE

REMARKS ***REMARKS***

FOOTNOTES
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1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 06/13/89

** PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL COLLECTION START: 05/03/89 1550 STOP: 00/00/00 **

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
46U	CHLOROMETHANE	46U	CIS-1,3-DICHLOROPROPENE
46U	VINYL CHLORIDE	460U	METHYL ISOBUTYL KETONE
46U	BROMOMETHANE	46U	TOLUENE
46U	CHLOROETHANE	46U	TRANS-1,3 DICHLOROPROPENE
46U	TRICHLOROFLUOROMETHANE	46U	1,1,2-TRICHLOROETHANE
46U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	46U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
460U	ACETONE	46U	1,3-DICHLOROPROPANE
460U	CARBON DISULFIDE	460U	METHYL BUTYL KETONE
46U	METHYLENE CHLORIDE	46U	DIBROMOCHLOROMETHANE
46U	TRANS-1,2-DICHLOROETHENE	46U	CHLOROBENZENE
46U	1,1-DICHLOROETHANE	46U	1,1,1,2-TETRACHLOROETHANE
460U	VINYL ACETATE	46U	ETHYL BENZENE
46U	CIS-1,2-DICHLOROETHENE	46U	(M- AND/OR P-)XYLENE
46U	2,2-DICHLOROPROPANE	46U	O-XYLENE
460U	METHYL ETHYL KETONE	46U	STYRENE
46U	BROMOCHLOROMETHANE	46U	BROMOFORM
46U	CHLOROFORM	46U	BROMOBENZENE
46U	1,1,1-TRICHLOROETHANE	46U	1,1,2,2-TETRACHLOROETHANE
46U	1,1-DICHLOROPROPENE	46U	1,2,3-TRICHLOROPROPANE
46U	CARBON TETRACHLORIDE	46U	O-CHLOROTOLUENE
46U	1,2-DICHLOROETHANE	46U	P-CHLOROTOLUENE
46U	BENZENE	46U	1,3-DICHLOROBENZENE
46U	TRICHLOROETHENE(TRICHLOROETHYLENE)	46U	1,4-DICHLOROBENZENE
46U	1,2-DICHLOROPROPANE	46U	1,2-DICHLOROBENZENE
46U	DIBROMOMETHANE	21.0	PERCENT MOISTURE
46U	BROMODICHLOROMETHANE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 05/30/89

PROJECT NO. 89-400 SAMPLE NO. 34899 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-02 SUBSURFACE SOIL #2

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1005 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
41U	CHLOROMETHANE	41U	CIS-1,3-DICHLOROPROPENE
41U	VINYL CHLORIDE	410U	METHYL ISOBUTYL KETONE
41U	BROMOMETHANE	41U	TOLUENE
41U	CHLOROETHANE	41U	TRANS-1,3-DICHLOROPROPENE
41U	TRICHLOROFLUOROMETHANE	41U	1,1,2-TRICHLOROETHANE
41U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	41U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
410U	ACETONE	41U	1,3-DICHLOROPROPANE
410U	CARBON DISULFIDE	410U	METHYL BUTYL KETONE
41U	METHYLENE CHLORIDE	41U	DIBROMOCHLOROMETHANE
41U	TRANS-1,2-DICHLOROETHENE	41U	CHLOROBENZENE
41U	1,1-DICHLOROETHANE	41U	1,1,1,2-TETRACHLOROETHANE
410U	VINYL ACETATE	41U	ETHYL BENZENE
41U	CIS-1,2-DICHLOROETHENE	41U	(M- AND/OR P-)XYLENE
41U	2,2-DICHLOROPROPANE	41U	O-XYLENE
410U	METHYL ETHYL KETONE	41U	STYRENE
41U	BROMOCHLOROMETHANE	41U	BROMOFORM
41U	CHLOROFORM	41U	BROMOBENZENE
41U	1,1,1-TRICHLOROETHANE	41U	1,1,2,2-TETRACHLOROETHANE
41U	1,1-DICHLOROPROPENE	41U	1,2,3-TRICHLOROPROPANE
41U	CARBON TETRACHLORIDE	41U	O-CHLOROTOLUENE
41U	1,2-DICHLOROETHANE	41U	P-CHLOROTOLUENE
41U	BENZENE	41U	1,3-DICHLOROBENZENE
41U	TRICHLOROETHENE(TRICHLOROETHYLENE)	41U	1,4-DICHLOROBENZENE
41U	1,2-DICHLOROPROPANE	41U	1,2-DICHLOROBENZENE
41U	DIBROMOMETHANE	22.0	PERCENT MOISTURE
41U	BROMODICHLOROMETHANE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 06/13/89

PROJECT NO. 89-400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-03 SUBSURFACE SOIL #03 COLLECTION START: 05/04/89 1225 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
110U	CHLOROMETHANE	110U	CIS 1,3-DICHLOROPROPENE
110U	VINYL CHLORIDE	1100U	METHYL ISOBUTYL KETONE
110U	BROMOMETHANE	110U	TOLUENE
110U	CHLOROETHANE	110U	TRANS-1,3 DICHLOROPROPENE
110U	TRICHLOROFLUOROMETHANE	110U	1,1,2-TRICHLOROETHANE
110U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	110U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
1100U	ACETONE	110U	1,3-DICHLOROPROPANE
1100U	CARBON DISULFIDE	1100U	METHYL BUTYL KETONE
110U	METHYLENE CHLORIDE	110U	DIBROMOCHLOROMETHANE
110U	TRANS-1,2-DICHLOROETHENE	110U	CHLOROBENZENE
110U	1,1-DICHLOROETHANE	110U	1,1,1,2-TETRACHLOROETHANE
1100U	VINYL ACETATE	110U	ETHYL BENZENE
110U	CIS-1,2-DICHLOROETHENE	110U	(M- AND/OR P-)XYLENE
110U	2,2-DICHLOROPROPANE	110U	O-XYLENE
1100U	METHYL ETHYL KETONE	110U	STYRENE
110U	BROMOCHLOROMETHANE	110U	BROMOFORM
110U	CHLOROFORM	110U	BROMOBENZENE
110U	1,1,1-TRICHLOROETHANE	110U	1,1,2,2-TETRACHLOROETHANE
110U	1,1 DICHLOROPROPENE	110U	1,2,3-TRICHLOROPROPANE
110U	CARBON TETRACHLORIDE	110U	O-CHLOROTOLUENE
110U	1,2-DICHLOROETHANE	110U	P-CHLOROTOLUENE
110U	BENZENE	110U	1,3-DICHLOROBENZENE
110U	TRICHLOROETHENE(TRICHLOROETHYLENE)	110U	1,4-DICHLOROBENZENE
110U	1,2-DICHLOROPROPANE	110U	1,2-DICHLOROBENZENE
110U	DIBROMOMETHANE	19.0	PERCENT MOISTURE
110U	BROMODICHLOROMETHANE		

REMARKS ***REMARKS***

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA. 06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL COLLECTION START: 05/03/89 1550 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
1700U	BIS(2 CHLOROETHYL) ETHER	1700U	FLUORANTHENE
1700U	BIS(2-CHLOROISOPROPYL) ETHER	1700U	PYRENE
1700U	N-NITROSODI-N-PROPYLAMINE	1700U	BENZYL BUTYL PHTHALATE
1700U	HEXACHLOROETHANE	1700U	3,3'-DICHLOROBENZIDINE
1700U	NITROBENZENE	1700U	BENZO(A)ANTHRACENE
1700U	ISOPHORONE	1700U	CHRYSENE
1700U	BIS(2-CHLOROETHOXY) METHANE	1700U	BIS(2-ETHYLHEXYL) PHTHALATE
1700U	1,2,4-TRICHLOROBENZENE	1700U	DI-N-OCTYLPHTHALATE
1700U	NAPHTHALENE	1700U	BENZO(B AND/OR K)FLUORANTHENE
1700U	4-CHLOROANILINE	1700U	BENZO-A-PYRENE
1700U	HEXACHLOROBUTADIENE	1700U	INDENO (1,2,3-CD) PYRENE
1700U	2-METHYLNAPHTHALENE	1700U	DIBENZO(A,H)ANTHRACENE
1700U	HEXACHLOROCYCLOPENTADIENE (HCCP)	1700U	BENZO(GHI)PERYLENE
1700U	2-CHLORONAPHTHALENE	1700U	PHENOL
1700U	2-NITROANILINE	1700U	2-CHLOROPHENOL
1700U	DIMETHYL PHTHALATE	3300U	BENZYL ALCOHOL
1700U	ACENAPHTHYLENE	1700U	2-METHYLPHENOL
1700U	2,6-DINITROTOLUENE	1700U	(3-AND/OR 4-)METHYLPHENOL
1700U	3-NITROANILINE	1700U	2-NITROPHENOL
1700U	ACENAPHTHENE	1700U	2,4-DIMETHYLPHENOL
1700U	DIBENZOFURAN	3300U	BENZOIC ACID
1700U	2,4-DINITROTOLUENE	1700U	2,4-DICHLOROPHENOL
1700U	DIETHYL PHTHALATE	1700U	4-CHLORO-3-METHYLPHENOL
1700U	FLUORENE	1700U	2,4,6-TRICHLOROPHENOL
1700U	4-CHLOROPHENYL PHENYL ETHER	1700U	2,4,5-TRICHLOROPHENOL
1700U	4-NITROANILINE	3300U	2,4-DINITROPHENOL
1700U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE	3300U	4-NITROPHENOL
1700U	4-BROMOPHENYL PHENYL ETHER	1700U	2,3,4,6-TETRACHLOROPHENOL
1700U	HEXACHLOROBENZENE (HCB)	3300U	2-METHYL-4,6-DINITROPHENOL
1700U	PHENANTHRENE	3300U	PENTACHLOROPHENOL
1700U	ANTHRACENE	21	PERCENT MOISTURE
1700U	DI-N-BUTYLPHTHALATE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT
STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1550 STOP: 00/00/00

ANALYTICAL RESULTS UG/KG

5000JN	HEXADECANOIC ACID
400JN	OCTADECANOIC ACID

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34899 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SB-02 SUBSURFACE SOIL #2 COLLECTION START: 05/04/89 1005 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
1700U	BIS(2 CHLOROETHYL) ETHER
1700U	BIS(2-CHLOROISOPROPYL) ETHER
1700U	N-NITROSODI-N-PROPYLAMINE
1700U	HEXACHLOROETHANE
1700U	NITROBENZENE
1700U	ISOPHORONE
1700U	BIS(2-CHLOROETHOXY) METHANE
1700U	1,2,4-TRICHLOROBENZENE
1700U	NAPHTHALENE
1700U	4-CHLOROANILINE
1700U	HEXACHLOROBUTADIENE
1700U	2-METHYLNAPHTHALENE
1700U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1700U	2-CHLORONAPHTHALENE
1700U	2-NITROANILINE
1700U	DIMETHYL PHTHALATE
1700U	ACENAPHTHYLENE
1700U	2,6-DINITROTOLUENE
1700U	3-NITROANILINE
1700U	ACENAPHTHENE
1700U	DIBENZOFURAN
1700U	2,4-DINITROTOLUENE
1700U	DIETHYL PHTHALATE
1700U	FLUORENE
1700U	4-CHLOROPHENYL PHENYL ETHER
1700U	4-NITROANILINE
1700U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1700U	4-BROMOPHENYL PHENYL ETHER
1700U	HEXACHLOROBENZENE (HCB)
1700U	PHENANTHRENE
1700U	ANTHRACENE
1700U	DI-N-BUTYLPHTHALATE

UG/KG	ANALYTICAL RESULTS
1700U	FLUORANTHENE
1700U	PYRENE
1700U	BENZYL BUTYL PHTHALATE
1700U	3,3'-DICHLOROBENZIDINE
1700U	BENZO(A)ANTHRACENE
1700U	CHRYSENE
1700U	BIS(2-ETHYLHEXYL) PHTHALATE
1700U	DI-N-OCTYLPHTHALATE
170J	BENZO(B AND/OR K)FLUORANTHENE
1700U	BENZO-A-PYRENE
1700U	INDENO (1,2,3-CD) PYRENE
1700U	DIBENZO(A,H)ANTHRACENE
1700U	BENZO(GHI)PERYLENE
1700U	PHENOL
1700U	2-CHLOROPHENOL
3400U	BENZYL ALCOHOL
1700U	2-METHYLPHENOL
1700U	(3-AND/OR 4-)METHYLPHENOL
1700U	2-NITROPHENOL
1700U	2,4-DIMETHYLPHENOL
3400U	BENZOIC ACID
1700U	2,4-DICHLOROPHENOL
1700U	4-CHLORO-3-METHYLPHENOL
1700U	2,4,6-TRICHLOROPHENOL
1700U	2,4,5-TRICHLOROPHENOL
3400U	2,4-DINITROPHENOL
3400U	4-NITROPHENOL
1700U	2,3,4,6-TETRACHLOROPHENOL
3400U	2-METHYL-4,6-DINITROPHENOL
3400U	PENTACHLOROPHENOL
22	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-03 SUBSURFACE SOIL #03

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1225 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
1700U	BIS(2 CHLOROETHYL) ETHER
1700U	BIS(2-CHLOROISOPROPYL) ETHER
1700U	N-NITROSODI-N-PROPYLAMINE
1700U	HEXACHLOROETHANE
1700U	NITROBENZENE
1700U	ISOPHORONE
1700U	BIS(2-CHLOROETHOXY) METHANE
1700U	1,2,4-TRICHLOROBENZENE
1700U	NAPHTHALENE
1700U	4-CHLOROANILINE
1700U	HEXACHLOROBUTADIENE
1700U	2-METHYLNAPHTHALENE
1700U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1700U	2-CHLORONAPHTHALENE
1700U	2-NITROANILINE
1700U	DIMETHYL PHTHALATE
1700U	ACENAPHTHYLENE
1700U	2,6-DINITROTOLUENE
1700U	3-NITROANILINE
1700U	ACENAPHTHENE
1700U	DIBENZOFURAN
1700U	2,4-DINITROTOLUENE
1700U	DIETHYL PHTHALATE
1700U	FLUORENE
1700U	4-CHLOROPHENYL PHENYL ETHER
1700U	4-NITROANILINE
1700U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1700U	4-BROMOPHENYL PHENYL ETHER
1700U	HEXACHLOROBENZENE (HCB)
1700U	PHENANTHRENE
1700U	ANTHRACENE
1700U	DI-N-BUTYLPHTHALATE

UG/KG	ANALYTICAL RESULTS
1700U	FLUORANTHENE
1700U	PYRENE
1700U	BENZYL BUTYL PHTHALATE
1700U	3,3'-DICHLOROBENZIDINE
1700U	BENZO(A)ANTHRACENE
1700U	CHRYSENE
1700U	BIS(2-ETHYLHEXYL) PHTHALATE
1700U	DI-N-OCTYLPHTHALATE
1700U	BENZO(B AND/OR K)FLUORANTHENE
1700U	BENZO-A-PYRENE
1700U	INDENO (1,2,3-CD) PYRENE
1700U	DIBENZO(A,H)ANTHRACENE
1700U	BENZO(GHI)PERYLENE
1700U	PHENOL
1700U	2-CHLOROPHENOL
3300U	BENZYL ALCOHOL
1700U	2-METHYLPHENOL
1700U	(3-AND/OR 4-)METHYLPHENOL
1700U	2-NITROPHENOL
1700U	2,4-DIMETHYLPHENOL
3300U	BENZOIC ACID
1700U	2,4-DICHLOROPHENOL
1700U	4-CHLORO-3-METHYLPHENOL
1700U	2,4,6-TRICHLOROPHENOL
1700U	2,4,5-TRICHLOROPHENOL
3300U	2,4-DINITROPHENOL
3300U	4-NITROPHENOL
1700U	2,3,4,6-TETRACHLOROPHENOL
3300U	2-METHYL-4,6-DINITROPHENOL
3300U	PENTACHLOROPHENOL
19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SB-03 SUBSURFACE SOIL #03 COLLECTION START: 05/04/89 1225 STOP: 00/00/00 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

200JN	TETRADECANOIC ACID
5000JN	HEXADECANOIC ACID
700JN	OCTADECANOIC ACID

FOOTNOTES
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*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/14/89

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1550 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
8.1U	ALDRIN
27U	HEPTACHLOR
8.1U	HEPTACHLOR EPOXIDE
8.1U	ALPHA-BHC
8.1U	BETA-BHC
8.1U	GAMMA BHC (LINDANE)
8.1U	DELTA-BHC
8.1U	ENDOSULFAN I (ALPHA)
8.1U	DIELDRIN
8.1U	4,4'-DDT (P,P'-DDT)
8.1U	4,4'-DDE (P,P'-DDE)
8.1U	4,4'-DDD (P,P'-DDD)
8.1U	ENDRIN
8.1U	ENDOSULFAN II (BETA)
8.1U	ENDOSULFAN SULFATE
42U	CHLORDANE (TECH. MIXTURE) /1
62U	PCB-1242 (AROCLOR 1242)
62U	PCB-1254 (AROCLOR 1254)
62U	PCB-1221 (AROCLOR 1221)

UG/KG	ANALYTICAL RESULTS
62U	PCB-1232 (AROCLOR 1232)
62U	PCB-1248 (AROCLOR 1248)
62U	PCB-1260 (AROCLOR 1260)
62U	PCB-1016 (AROCLOR 1016)
310U	TOXAPHENE
---	CHLORDENE /2
---	ALPHA-CHLORDENE /2
---	BETA CHLORDENE /2
---	GAMMA-CHLORDENE /2
---	1-HYDROXYCHLORDENE /2
---	GAMMA-CHLORDANE /2
---	TRANS-NONACHLOR /2
---	ALPHA-CHLORDANE /2
---	CIS-NONACHLOR /2
---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
19U	METHOXYCHLOR
8.1U	ENDRIN KETONE
21	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

PROJECT NO. 89-400 SAMPLE NO. 34899 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-02 SUBSURFACE SOIL #2

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1005 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
8.1U	ALDRIN	62U	PCB-1232 (AROCLOR 1232)
8.1U	HEPTACHLOR	62U	PCB-1248 (AROCLOR 1248)
8.1U	HEPTACHLOR EPOXIDE	62U	PCB-1260 (AROCLOR 1260)
8.1U	ALPHA-BHC	62U	PCB-1016 (AROCLOR 1016)
8.1U	BETA-BHC	310U	TOXAPHENE
8.1U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
8.1U	DELTA-BHC	---	ALPHA-CHLORDENE /2
8.1U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
8.1U	DIELDRIN	---	GAMMA-CHLORDENE /2
8.1J	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
8.1U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
8.1U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
8.1U	ENDRIN	---	ALPHA-CHLORDANE /2
8.1U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
8.1U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
42U	CHLORDANE (TECH. MIXTURE) /1	19U	METHOXYCHLOR
62U	PCB-1242 (AROCLOR 1242)	8.1U	ENDRIN KETONE
62U	PCB-1254 (AROCLOR 1254)	22	PERCENT MOISTURE
62U	PCB-1221 (AROCLOR 1221)		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

PROJECT NO. 89-400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-03 SUBSURFACE SOIL #03

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1225 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
8.1U	ALDRIN
8.1U	HEPTACHLOR
8.1U	HEPTACHLOR EPOXIDE
8.1U	ALPHA-BHC
8.1U	BETA-BHC
8.1U	GAMMA BHC (LINDANE)
8.1U	DELTA-BHC
8.1U	ENDOSULFAN I (ALPHA)
8.1U	DIELDRIN
8.1U	4,4'-DDT (P,P'-DDT)
8.1U	4,4'-DDE (P,P'-DDE)
8.1U	4,4'-DDD (P,P'-DDD)
8.1U	ENDRIN
8.1U	ENDOSULFAN II (BETA)
8.1U	ENDOSULFAN SULFATE
42U	CHLORDANE (TECH. MIXTURE) /1
62U	PCB-1242 (AROCLOR 1242)
62U	PCB-1254 (AROCLOR 1254)
62U	PCB-1221 (AROCLOR 1221)

UG/KG	ANALYTICAL RESULTS
62U	PCB-1232 (AROCLOR 1232)
62U	PCB-1248 (AROCLOR 1248)
62U	PCB-1260 (AROCLOR 1260)
62U	PCB-1016 (AROCLOR 1016)
310U	TOXAPHENE
---	CHLORDENE /2
---	ALPHA-CHLORDENE /2
---	BETA CHLORDENE /2
---	GAMMA-CHLORDENE /2
---	1-HYDROXYCHLORDENE /2
---	GAMMA-CHLORDANE /2
---	TRANS-NONACHLOR /2
---	ALPHA-CHLORDANE /2
---	CIS-NONACHLOR /2
---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
19U	METHOXYCHLOR
8.1U	ENDRIN KETONE
19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 06/13/89

PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SD-01 BACKGROUND SEDIMENT SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1630 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
44U	CHLOROMETHANE	44U	CIS 1,3-DICHLOROPROPENE
44U	VINYL CHLORIDE	440U	METHYL ISOBUTYL KETONE
44U	BROMOMETHANE	44U	TOLUENE
44U	CHLOROETHANE	44U	TRANS-1,3 DICHLOROPROPENE
44U	TRICHLOROFLUOROMETHANE	44U	1,1,2-TRICHLOROETHANE
44U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	44U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
440U	ACETONE	44U	1,3-DICHLOROPROPANE
440U	CARBON DISULFIDE	440U	METHYL BUTYL KETONE
44U	METHYLENE CHLORIDE	44U	DIBROMOCHLOROMETHANE
44U	TRANS-1,2-DICHLOROETHENE	44U	CHLOROBENZENE
44U	1,1-DICHLOROETHANE	44U	1,1,1,2-TETRACHLOROETHANE
440U	VINYL ACETATE	44U	ETHYL BENZENE
44U	CIS-1,2-DICHLOROETHENE	44U	(M- AND/OR P-)XYLENE
44U	2,2-DICHLOROPROPANE	44U	O-XYLENE
440U	METHYL ETHYL KETONE	44U	STYRENE
44U	BROMOCHLOROMETHANE	44U	BROMOFORM
44U	CHLOROFORM	44U	BROMOBENZENE
44U	1,1,1-TRICHLOROETHANE	44U	1,1,2,2-TETRACHLOROETHANE
44U	1,1 DICHLOROPROPENE	44U	1,2,3-TRICHLOROPROPANE
44U	CARBON TETRACHLORIDE	44U	O-CHLOROTOLUENE
44U	1,2-DICHLOROETHANE	44U	P-CHLOROTOLUENE
44U	BENZENE	44U	1,3-DICHLOROBENZENE
44U	TRICHLOROETHENE(TRICHLOROETHYLENE)	44U	1,4-DICHLOROBENZENE
44U	1,2-DICHLOROPROPANE	44U	1,2-DICHLOROBENZENE
44U	DIBROMOMETHANE	33.0	PERCENT MOISTURE
44U	BROMODICHLOROMETHANE		

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 06/13/89

PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SD-02 SEDIMENT SOIL #02 COLLECTION START: 05/03/89 1815 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
73U	CHLOROMETHANE	73U	CIS 1,3-DICHLOROPROPENE
73U	VINYL CHLORIDE	730U	METHYL ISOBUTYL KETONE
73U	BROMOMETHANE	73U	TOLUENE
73U	CHLOROETHANE	73U	TRANS-1,3 DICHLOROPROPENE
73U	TRICHLOROFLUOROMETHANE	73U	1,1,2-TRICHLOROETHANE
73U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	73U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
730U	ACETONE	73U	1,3-DICHLOROPROPANE
730U	CARBON DISULFIDE	730U	METHYL BUTYL KETONE
73U	METHYLENE CHLORIDE	73U	DIBROMOCHLOROMETHANE
73U	TRANS-1,2-DICHLOROETHENE	73U	CHLOROBENZENE
73U	1,1-DICHLOROETHANE	73U	1,1,1,2-TETRACHLOROETHANE
730U	VINYL ACETATE	73U	ETHYL BENZENE
73U	CIS-1,2-DICHLOROETHENE	73U	(M- AND/OR P-)XYLENE
73U	2,2-DICHLOROPROPANE	73U	O-XYLENE
730U	METHYL ETHYL KETONE	73U	STYRENE
73U	BROMOCHLOROMETHANE	73U	BROMOFORM
73U	CHLOROFORM	73U	BROMOBENZENE
73U	1,1,1-TRICHLOROETHANE	73U	1,1,2,2-TETRACHLOROETHANE
73U	1,1-DICHLOROPROPENE	73U	1,2,3-TRICHLOROPROPANE
73U	CARBON TETRACHLORIDE	73U	O-CHLOROTOLUENE
73U	1,2-DICHLOROETHANE	73U	P-CHLOROTOLUENE
73U	BENZENE	73U	1,3-DICHLOROBENZENE
73U	TRICHLOROETHENE(TRICHLOROETHYLENE)	73U	1,4-DICHLOROBENZENE
73U	1,2-DICHLOROPROPANE	73U	1,2-DICHLOROBENZENE
73U	DIBROMOMETHANE	48.0	PERCENT MOISTURE
73U	BROMODICHLOROMETHANE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SD-01 BACKGROUND SEDIMENT SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START. 05/03/89 1630 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
2000UJ	BIS(2 CHLOROETHYL) ETHER	2000UJ	FLUORANTHENE
2000UJ	BIS(2-CHLOROISOPROPYL) ETHER	2000UJ	PYRENE
2000UJ	N-NITROSODI-N-PROPYLAMINE	2000UJ	BENZYL BUTYL PHTHALATE
2000UJ	HEXACHLOROETHANE	2000UJ	3,3'-DICHLOROBENZIDINE
2000UJ	NITROBENZENE	2000UJ	BENZO(A)ANTHRACENE
2000UJ	ISOPHORONE	2000UJ	CHRYSENE
2000UJ	BIS(2-CHLOROETHOXY) METHANE	2000UJ	BIS(2-ETHYLHEXYL) PHTHALATE
2000UJ	1,2,4-TRICHLOROBENZENE	2000UJ	DI-N-OCTYLPHTHALATE
2000UJ	NAPHTHALENE	2000UJ	BENZO(B AND/OR K)FLUORANTHENE
2000UJ	4-CHLOROANILINE	2000UJ	BENZO-A-PYRENE
2000UJ	HEXACHLOROBUTADIENE	2000UJ	INDENO (1,2,3-CD) PYRENE
2000UJ	2-METHYLNAPHTHALENE	2000UJ	DIBENZO(A,H)ANTHRACENE
2000UJ	HEXACHLOROCYCLOPENTADIENE (HCCP)	2000UJ	BENZO(GHI)PERYLENE
2000UJ	2-CHLORONAPHTHALENE	2000UJ	PHENOL
2000UJ	2-NITROANILINE	2000UJ	2-CHLOROPHENOL
2000UJ	DIMETHYL PHTHALATE	4000UJ	BENZYL ALCOHOL
2000UJ	ACENAPHTHYLENE	2000UJ	2-METHYLPHENOL
2000UJ	2,6-DINITROTOLUENE	2000UJ	(3-AND/OR 4-)METHYLPHENOL
2000UJ	3-NITROANILINE	2000UJ	2-NITROPHENOL
2000UJ	ACENAPHTHENE	2000UJ	2,4-DIMETHYLPHENOL
2000UJ	DIBENZOFURAN	4000UJ	BENZOIC ACID
2000UJ	2,4-DINITROTOLUENE	2000UJ	2,4-DICHLOROPHENOL
2000UJ	DIETHYL PHTHALATE	2000UJ	4-CHLORO-3-METHYLPHENOL
2000UJ	FLUORENE	2000UJ	2,4,6-TRICHLOROPHENOL
2000UJ	4-CHLOROPHENYL PHENYL ETHER	2000UJ	2,4,5-TRICHLOROPHENOL
2000UJ	4-NITROANILINE	4000UJ	2,4-DINITROPHENOL
2000UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE	4000UJ	4-NITROPHENOL
2000UJ	4-BROMOPHENYL PHENYL ETHER	2000UJ	2,3,4,6-TETRACHLOROPHENOL
2000UJ	HEXACHLOROBENZENE (HCB)	4000UJ	2-METHYL-4,6-DINITROPHENOL
2000UJ	PHENANTHRENE	4000UJ	PENTACHLOROPHENOL
2000UJ	ANTHRACENE	33	PERCENT MOISTURE
2000UJ	DI-N-BUTYLPHTHALATE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT CITY: ATHENS ST: GA **
** STATION ID: SD-01 BACKGROUND SEDIMENT SOIL COLLECTION START: 05/03/89 1630 STOP: 00/00/00 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

2000JN HEXADECANOIC ACID

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SD-02 SEDIMENT SOIL #02

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1815 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
2500U	BIS(2-CHLOROETHYL) ETHER
2500U	BIS(2-CHLOROISOPROPYL) ETHER
2500U	N-NITROSODI-N-PROPYLAMINE
2500U	HEXACHLOROETHANE
2500U	NITROBENZENE
2500U	ISOPHORONE
2500U	BIS(2-CHLOROETHOXY) METHANE
2500U	1,2,4-TRICHLOROBENZENE
2500U	NAPHTHALENE
2500U	4-CHLOROANILINE
2500U	HEXACHLOROBUTADIENE
2500U	2-METHYLNAPHTHALENE
2500U	HEXACHLOROCYCLOPENTADIENE (HCCP)
2500U	2-CHLORONAPHTHALENE
2500U	2-NITROANILINE
2500U	DIMETHYL PHTHALATE
2500U	ACENAPHTHYLENE
2500U	2,6-DINITROTOLUENE
2500U	3-NITROANILINE
2500U	ACENAPHTHENE
2500U	DIBENZOFURAN
2500U	2,4-DINITROTOLUENE
2500U	DIETHYL PHTHALATE
2500U	FLUORENE
2500U	4-CHLOROPHENYL PHENYL ETHER
2500U	4-NITROANILINE
2500U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
2500U	4-BROMOPHENYL PHENYL ETHER
2500U	HEXACHLOROBENZENE (HCB)
2500U	PHENANTHRENE
2500U	ANTHRACENE
2500U	DI-N-BUTYLPHTHALATE

UG/KG	ANALYTICAL RESULTS
2500U	FLUORANTHENE
2500U	PYRENE
2500U	BENZYL BUTYL PHTHALATE
2500U	3,3'-DICHLOROBENZIDINE
2500U	BENZO(A)ANTHRACENE
2500U	CHRYSENE
2500U	BIS(2-ETHYLHEXYL) PHTHALATE
2500U	DI-N-OCTYLPHTHALATE
2500U	BENZO(B AND/OR K)FLUORANTHENE
2500U	BENZO-A-PYRENE
2500U	INDENO (1,2,3-CD) PYRENE
2500U	DIBENZO(A,H)ANTHRACENE
2500U	BENZO(GHI)PERYLENE
2500U	PHENOL
2500U	2-CHLOROPHENOL
5000U	BENZYL ALCOHOL
2500U	2-METHYLPHENOL
2500U	(3-AND/OR 4-)METHYLPHENOL
2500U	2-NITROPHENOL
2500U	2,4-DIMETHYLPHENOL
5000U	BENZOIC ACID
2500U	2,4-DICHLOROPHENOL
2500U	4-CHLORO-3-METHYLPHENOL
2500U	2,4,6-TRICHLOROPHENOL
2500U	2,4,5-TRICHLOROPHENOL
5000U	2,4-DINITROPHENOL
5000U	4-NITROPHENOL
2500U	2,3,4,6-TETRACHLOROPHENOL
5000U	2-METHYL-4,6-DINITROPHENOL
5000U	PENTACHLOROPHENOL
48	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT
STATION ID: SD-02 SEDIMENT SOIL #02

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1815 STOP: 00/00/00

ANALYTICAL RESULTS UG/KG

6000JN	HEXADECANOIC ACID
700JN	OCTADECANOIC ACID
N	PETROLEUM PRODUCT

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

** PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SD-01 BACKGROUND SEDIMENT SOIL COLLECTION START: 05/03/89 1630 STOP: 00/00/00 **

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
9.5U	ALDRIN	73U	PCB-1232 (AROCLOR 1232)
9.5U	HEPTACHLOR	73U	PCB-1248 (AROCLOR 1248)
9.5U	HEPTACHLOR EPOXIDE	73U	PCB-1260 (AROCLOR 1260)
9.5U	ALPHA-BHC	73U	PCB-1016 (AROCLOR 1016)
9.5U	BETA-BHC	360U	TOXAPHENE
9.5U	GAMMA BHC (LINDANE)	---	CHLORDENE /2
9.5U	DELTA-BHC	---	ALPHA-CHLORDENE /2
9.5U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
9.5U	DIELDRIN	---	GAMMA-CHLORDENE /2
9.5U	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
9.5U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
9.5U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
9.5U	ENDRIN	---	ALPHA-CHLORDANE /2
9.5U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
9.5U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
49U	CHLORDANE (TECH. MIXTURE) /1	22U	METHOXYCHLOR
73U	PCB-1242 (AROCLOR 1242)	9.5U	ENDRIN KETONE
73U	PCB-1254 (AROCLOR 1254)	33	PERCENT MOISTURE
73U	PCB-1221 (AROCLOR 1221)		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 06/14/89

PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SD-02 SEDIMENT SOIL #02

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1815 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
12U	ALDRIN	90U	PCB-1232 (AROCLOR 1232)
12U	HEPTACHLOR	90U	PCB-1248 (AROCLOR 1248)
12U	HEPTACHLOR EPOXIDE	90U	PCB-1260 (AROCLOR 1260)
12U	ALPHA-BHC	90U	PCB-1016 (AROCLOR 1016)
12U	BETA-BHC	450U	TOXAPHENE
12U	GAMMA-BHC (LINDANE)	---	CHLORDENE /2
12U	DELTA-BHC	---	ALPHA-CHLORDENE /2
12U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
12U	DIELDRIN	---	GAMMA-CHLORDENE /2
12U	4,4'-DDT (P,P'-DDT)	---	1-HYDROXYCHLORDENE /2
12U	4,4'-DDE (P,P'-DDE)	---	GAMMA-CHLORDANE /2
12U	4,4'-DDD (P,P'-DDD)	---	TRANS-NONACHLOR /2
12U	ENDRIN	---	ALPHA-CHLORDANE /2
12U	ENDOSULFAN II (BETA)	---	CIS-NONACHLOR /2
12U	ENDOSULFAN SULFATE	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
61U	CHLORDANE (TECH. MIXTURE) /1	28U	METHOXYCHLOR
90U	PCB-1242 (AROCLOR 1242)	12U	ENDRIN KETONE
90U	PCB-1254 (AROCLOR 1254)	48	PERCENT MOISTURE
90U	PCB-1221 (AROCLOR 1221)		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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APPENDIX C

Site Inspection Report

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D003295144

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Westinghouse Electric Corporation	Newton Bridge Road

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Athens	GA		Clarke		

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
33 58 21.0	083 23 44.0	☒ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
05 03 89 (MONTH DAY YEAR)	☒ ACTIVE ☐ INACTIVE	1957 (BEGINNING YEAR) / Present (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☒ B. EPA CONTRACTOR NUS Corporation (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ______ (Name of firm)
☐ E. STATE ☐ F. STATE CONTRACTOR ______ (Name of firm) ☐ G. OTHER ______ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO
Rebecca A. Hoffmann	Environmental Scientist	NUS Corporation	(404) 938-7710

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO
Phillp Henderson	Geologist	NUS Corporation	(404) 938-7710
Ron Young	Sampler	NUS Corporation	(404) 938-7710
Ron Wilde	Sampler	NUS Corporation	(404) 938-7710
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Frank James	Environmental Control Officer	Westinghouse Electic Corp. Newton Bridge Rd. Athens GA.	(404) 548-3121
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	0820	≈ 69°F, clear and sunny

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO
Mario Villamarzo	U.S.E.P.A	(404) 347-5065

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Rebecca A. Hoffmann	U.S.E.P.A	NUS Corporation	404-938-7710	05/30/90 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D003295144

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- A. SOLID
- B. POWDER, FINES
- X C. SLUDGE
- D. OTHER ________ (Specify)
- E. SLURRY
- X F. LIQUID
- G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS ________

CUBIC YARDS unk

NO. OF DRUMS unk

03 WASTE CHARACTERISTICS (Check all that apply)

- X A. TOXIC
- X B. CORROSIVE
- C. RADIOACTIVE
- D. PERSISTENT
- E. SOLUBLE
- F. INFECTIOUS
- G. FLAMMABLE
- H. IGNITABLE
- X I. HIGHLY VOLATILE
- J. EXPLOSIVE
- K. REACTIVE
- L. INCOMPATIBLE
- M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	unk		
OLW	OILY WASTE	unk		
SOL	SOLVENTS	unk		
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS	unk		
BAS	BASES	unk		
MES	HEAVY METALS	unk		

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	Phosphoric acid	7664-38-2	5, 55 gal. drums	unk	
	hydrochloric acid	7647-01-0	5, 55 gal. drums	unk	
	methyl ethyl Ketone	NONE	5, 55 gal. drums	unk	
	Kerosene	NONE	5, 55 gal. drums	unk	
	xylene	1330-20-7	5, 55 gal. drums		

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA and state file material

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: GA | 02 SITE NUMBER: D003295144

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 [ ] OBSERVED (DATE ______) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ______ — 04 NARRATIVE DESCRIPTION

There is not a liner present at the landfill

01 [X] B. SURFACE WATER CONTAMINATION — 02 [X] OBSERVED (DATE 05/03/89) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ______ — 04 NARRATIVE DESCRIPTION

Sediment samples collected along possible surface water migration pathway revealed the presence of inorganic contamination

01 [X] C. CONTAMINATION OF AIR — 02 [ ] OBSERVED (DATE ______) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ______ — 04 NARRATIVE DESCRIPTION

Contaminated soils on the surface of the landfill are uncontained

01 [ ] D. FIRE EXPLOSIVE CONDITIONS — 02 [ ] OBSERVED (DATE ______) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ______ — 04 NARRATIVE DESCRIPTION

01 [X] E. DIRECT CONTACT — 02 [ ] OBSERVED (DATE ______) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ______ — 04 NARRATIVE DESCRIPTION

There are no fences or barriers to entry in place around the landfill.

01 [X] F. CONTAMINATION OF SOIL — 02 [X] OBSERVED (DATE 05/03/89) — [ ] POTENTIAL — [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED: <1 (Acres) — 04 NARRATIVE DESCRIPTION

01 [ ] G. DRINKING WATER CONTAMINATION — 02 [ ] OBSERVED (DATE ______) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ______ — 04 NARRATIVE DESCRIPTION

01 [ ] H. WORKER EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE ______) — [ ] POTENTIAL — [ ] ALLEGED
03 WORKERS POTENTIALLY AFFECTED: ______ — 04 NARRATIVE DESCRIPTION

01 [X] I. POPULATION EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE ______) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ______ — 04 NARRATIVE DESCRIPTION

There is a population of approximately 49,884 within the 4-mile site radius.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GA	D003295144

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 [X] J DAMAGE TO FLORA — 02 [ ] OBSERVED (DATE ______) [X] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION
Contamination of surface soils has been documented at the landfill.

01 [ ] K DAMAGE TO FAUNA — 02 [ ] OBSERVED (DATE ______) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

01 [ ] L CONTAMINATION OF FOOD CHAIN — 02 [ ] OBSERVED (DATE ______) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

01 [ ] M UNSTABLE CONTAINMENT OF WASTES (Spills, Runoff, Standing liquids, Leaking drums) — 02 [ ] OBSERVED (DATE ______) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ______ 04 NARRATIVE DESCRIPTION

01 [ ] N DAMAGE TO OFFSITE PROPERTY — 02 [ ] OBSERVED (DATE ______) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

01 [ ] O CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 [ ] OBSERVED (DATE ______) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

01 [ ] P ILLEGAL/UNAUTHORIZED DUMPING — 02 [ ] OBSERVED (DATE ______) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 49,884 (air pathway)

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA, state file material

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D003295144

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☒ J. NONE				landfill used 1957 – 1970

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☒ F. LANDFILL	unk.	
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)
- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER ______ (Specify)

05 OTHER
- ☐ A. BUILDINGS ON SITE

06 AREA OF SITE: <1 Acres

07 COMMENTS

Westinghouse disposed of manufacturing wastes in a landfill from 1957 to 1970. The landfill is located approximately 900 feet northeast of the active portion of Westinghouse.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☒ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

The landfill has been covered with soil and is heavily vegetated. There are several rusty drums located on the surface of the landfill but not a significant number.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE ☒ YES ☐ NO

02 COMMENTS

See Direct contact under hazardous conditions and incidents

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

EPA and state file material

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D003295144

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL	02 STATUS: ENDANGERED	AFFECTED	MONITORED	03 DISTANCE TO SITE
COMMUNITY	A ☒	B ☐	A. ☐	B. ☐	C. ☒	A 2.5 (mi)
NON-COMMUNITY	C ☐	D ☒	D ☐	E. ☐	F ☐	B. 1 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING
☒ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)
☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available)
☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER: 11.4

03 DISTANCE TO NEAREST DRINKING WATER WELL: 1 (mi)

04 DEPTH TO GROUNDWATER: varies w/topography

05 DIRECTION OF GROUNDWATER FLOW: varies

06 DEPTH TO AQUIFER OF CONCERN: 246 (ft)

07 POTENTIAL YIELD OF AQUIFER: 37440 (gpd)

08 SOLE SOURCE AQUIFER: ☒ YES ☐ NO

09 DESCRIPTION OF WELLS (including useage, depth, and location relative to population and buildings)

There are 3 known private wells within the 4-mile site radius

10 RECHARGE AREA: ☒ YES ☐ NO
COMMENTS: recharge occurs in topographic highs

11 DISCHARGE AREA: ☒ YES ☐ NO
COMMENTS: Discharge occurs in topographic lows

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR, RECREATION DRINKING WATER SOURCE
☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES
☐ C. COMMERCIAL, INDUSTRIAL
☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME	AFFECTED	DISTANCE TO SITE
None - there are no routes for surface water	☐	(mi)
migration from the site	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A 486 NO. OF PERSONS	B. 18,718 NO. OF PERSONS	C. 18,265 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION: 0.5 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE: ______

04 DISTANCE TO NEAREST OFF-SITE BUILDING: 0.3 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

Within a 4-mile site radius, the area is comprised, in descending percentage, of rural/undeveloped, residential, commercial, and industrial property.

EPA

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: GA | 02 SITE NUMBER: D003295144

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)
☐ A. 10^{-6} – 10^{-8} cm/sec ☐ B. 10^{-4} – 10^{-6} cm/sec ☒ C. 10^{-4} – 10^{-3} cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)
☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE (10^{-4} – 10^{-6} cm/sec) ☒ C. RELATIVELY PERMEABLE (10^{-2} – 10^{-4} cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK: varies (ft)
04 DEPTH OF CONTAMINATED SOIL ZONE: <1 (ft)
05 SOIL pH: unk

06 NET PRECIPITATION: 2 (in)
07 ONE YEAR 24 HOUR RAINFALL: ______ (in)
08 SLOPE: SITE SLOPE: 2 % | DIRECTION OF SITE SLOPE: east | TERRAIN AVERAGE SLOPE: 3-4 %

09 FLOOD POTENTIAL: SITE IS IN ______ YEAR FLOODPLAIN
10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)
ESTUARINE: A. ______ (mi) OTHER: B. ______ (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species): ______ (mi)
ENDANGERED SPECIES: ______

13 LAND USE IN VICINITY
DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS, NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A. 0.3 (mi)	B. 0.7 (mi)	C. unk (mi)	D. unk (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The landfill is located on a ridge approximately 900 feet from the WEC facility. The land slopes down gradually towards the east. The area is heavily vegetated with large tree and underbrush.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA and state file material

EPA

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GA	D003295144

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	7	Region IV Environmental Protection Agency analytical service laboratory, Athens, GA	6/19/89
VEGETATION			
OTHER Sediment	2	same as above	6/19/89

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☐ AERIAL

02 IN CUSTODY OF NUS Corporation
(Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS NUS Corporation, Region IV

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

A geophysical survey was conducted to delineate areas where hazardous waste was alleged to have been buried, and to provide sampling team with information that would aide in the selection of sampling locations. Significant magnetic anomalies were detected within the area that was surveyed. Two locations within this area were targeted for sampling.

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA, State, and NUS Corporation file material

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GA	D003295144

II. CURRENT OWNER(S) / PARENT COMPANY (If applicable)

Current Owner			Parent Company		
01 NAME: Westinghouse Electric Corporation		02 D+B NUMBER:	08 NAME: Westinghouse Electric Corporation		09 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.): Newton Bridge Rd.		04 SIC CODE:	10 STREET ADDRESS (P.O. Box, RFD #, etc.): 11 Stanwix Street		11 SIC CODE:
05 CITY: Athens	06 STATE: GA	07 ZIP CODE: 30613	12 CITY: Pittsburg	13 STATE: PA	14 ZIP CODE: 15222
01 NAME		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
01 NAME		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
01 NAME		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first) / IV. REALTY OWNER(S) (If applicable, list most recent first)

Previous Owner			Realty Owner		
01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

EPA and state file material

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GA	D003295144

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME		02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER	

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME		11 D+B NUMBER
12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

01 NAME		02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD	
01 NAME		02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD	
01 NAME		02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD	

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

10 NAME		11 D+B NUMBER
12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
14 CITY	15 STATE	16 ZIP CODE
10 NAME		11 D+B NUMBER
12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
14 CITY	15 STATE	16 ZIP CODE
10 NAME		11 D+B NUMBER
12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
14 CITY	15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA and state file material

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D003295144

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Westinghouse Electric Corporation	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
Newton Bridge Road	

05 CITY	06 STATE	07 ZIP CODE
Athens	GA	30613

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA and state file material

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GA	D003295144

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION
NONE

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ F. WASTE REPACKAGED — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ H. ON SITE BURIAL — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ L. ENCAPSULATION — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ N. CUTOFF WALLS — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D003295144

II PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ S. CAPPING/COVERING 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ T. BULK TANKAGE REPAIRED 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ W. GAS CONTROL 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ X. FIRE CONTROL 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES 02 DATE ______ 03 AGENCY ______
04 DESCRIPTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GA	D003295144

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY ENFORCEMENT ACTION

NONE

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

APPENDIX D

Background
1029

MAG FIELD DATA SHEET

10 ft pacing
Downhill

STATION X	STATION Y	Reading	Reading	Reading	Average (gammas)	Comments
0	0	52588				
0	1	52599				
0	2	52602				
0	3	52599				
0	4	52612				
0	5	52630				
0	6	52642				
0	7	52657				
0	8	52676				

* Field data sheet is an extension of Geophysical Logbook F1-1377.

Location Westinghouse Albany GA Ave 52622

File name West

page __ of __

MAG FIELD DATA SHEET

SW Station 0,0
corner

STATION X	STATION Y	Reading	Reading	Reading	Average (gammas)	Comments
0	0	52690				
0	1	52453				
0	2	52569				
0	3	52765				
0	4	52540				
0	5	52727				
0	6	53146				
0	7	52736				
0	8	52447				
0	9	52575				
0	10	53123				
0	11	52195				
0	12	52396				
1	0	52625				
1	1	52716				
1	2	52616				
	3	52614				
	4	52772				
	5	52899				
	6	53277				
	7	* 53427				
	8	52249				
	9	51793				
	10					
1	11					

12

* Field data sheet is an extension of Geophysical Logbook ________.

Location ____________________

MAG FIELD DATA SHEET

SW corner

W corner

STATION X	STATION Y	Reading	Reading	Reading	Average (gammas)	Comments
2	0	52602				
	1	52641				
	2	52679				
	3	52751				
	4	52848				
	5	52532				
	6	52483				
	7	52407				
	8	52348				
	9	52486				
	10	52516				
3	0	52642				
	1	52613				
	2	52556				
	3	52641				
	4	* 52744				
	5	52486				
	6	52591				
	7	52488				
	8	52502				
✓	9	52538				
4	0	52572				
	1	52545				
	2	52623				
	3	52771				

* Field data sheet is an extension of Geophysical Logbook ____________.

Location ______________________________

page __ of __

MAG FIELD DATA SHEET

SW corner

STATION X	STATION Y	Reading	Reading	Reading	Average (gammas)	Comments
4	4	52866				
	5	52535				
	6	52420				
	7	52523				
	8	52527				
	9	52556				
-1	0					
	1					
	2					
	3					
	4	52544				
	5	52450				
	6	52279				
	7	53242				
	8	53420				
	9	53200				
	10	52737				
	11	52848				
	12	53438				

* Field data sheet is an extension of Geophysical Logbook ________.

Location ____________________

HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

WESTINGHOUSE ELECTRIC CORPORATION/ATHENS
EPA SITE NUMBER GAD003295144
ATHENS
CLARKE COUNTY, GA
EPA REGION: 4

SCORE STATUS: IN PREPARATION

SCORED BY R.HOFFMANN
OF NUS CORPORATION
ON 05/22/90

DATE OF THIS REPORT: 05/22/90
DATE OF LAST MODIFICATION: 05/22/90

GROUND WATER ROUTE SCORE	:	19.05
SURFACE WATER ROUTE SCORE	:	39.67
AIR ROUTE SCORE	:	0.00
MIGRATION SCORE	:	24.92

Facility name: Westclox

Location: 100 Newton Bridge Road, Athens, GA 30613

EPA Region: IV

Person(s) in charge of the facility: Bob Mills, Loss Control Administrator

Name of Reviewer: Elizabeth G. Topp   Date: 6-20-88

General description of the facility:

(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

Westclox, manufacturer of watch and clock parts, has been in operation at its present location, one-half mile north of Athens, since 1953. An outside above-ground trichloroethylene storage tank sits on an unlined earthen surface with no containment walls. The hazardous waste drum storage area has no containment walls. A fuel oil spill occurred, and was cleaned up, in 1985.

Scores: S_M = (S_{gw} = 17.73 S_{sw} = 25.85 S_a = not scored)

S_{FE} = not scored

S_{DC} = 0

FIGURE 1
HRS COVER SHEET

Ground Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1	0	45	3.1
If observed release is given a score of 45, proceed to line 4. If observed release is given a score of 0, proceed to line 2.					
2 Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 2 3	2	4	6	
Net Precipitation	0 1 2 3	1	2	3	
Permeability of the Unsaturated Zone	0 1 2 3	1	2	3	
Physical State	0 1 2 3	1	3	3	
	Total Route Characteristics Score		11	15	
3 Containment	0 1 2 3	1	3	3	3.3
4 Waste Characteristics					3.4
Toxicity/Persistence	0 3 6 9 12 15 18	1	12	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	2	8	
	Total Waste Characteristics Score		14	26	
5 Targets					3.5
Ground Water Use	0 1 2 3	3	6	9	
Distance to Nearest Well/Population Served	0 4 6 8 10 / 12 16 18 20 / 24 30 32 35 40	1	16	40	
	Total Targets Score		22	49	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			10164	57,330	
7 Divide line 6 by 57,330 and multiply by 100			S_{gw} = 17.73		

FIGURE 2
GROUND WATER ROUTE WORK SHEET

Surface Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1	0	45	4.1
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	0 1 2 3	1	0	3	
1-yr. 24-hr. Rainfall	0 1 2 3	1	2	3	
Distance to Nearest Surface Water	0 1 2 3	2	4	6	
Physical State	0 1 2 3	1	3	3	
	Total Route Characteristics Score		9	15	
3 Containment	0 1 2 3	1	3	3	4.3
4 Waste Characteristics					4.4
Toxicity/Persistence	0 3 6 9 12 15 18	1	12	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	2	8	
	Total Waste Characteristics Score		14	26	
5 Targets					4.5
Surface Water Use	0 1 2 3	3	9	9	
Distance to a Sensitive Environment	0 1 2 3	2	0	6	
Population Served/Distance to Water Intake Downstream	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1	35	40	
	Total Targets Score		44	55	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			16632	64,350	
7 Divide line 6 by 64,350 and multiply by 100			S_{SW} = 25.85		

FIGURE 7
SURFACE WATER ROUTE WORK SHEET

Air Route Work Sheet not scored					
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1		45	5.1
Date and Location:					
Sampling Protocol:					
If line 1 is 0, the S_a = 0. Enter on line 5. If line 1 is 45, then proceed to line 2.					
2 Waste Characteristics					5.2
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
	Total Waste Characteristics Score			20	
3 Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
	Total Targets Score			39	
4 Multiply 1 x 2 x 3				35,100	
5 Divide line 4 by 35,100 and multiply by 100	S_a =				

FIGURE 9
AIR ROUTE WORK SHEET

	S	S^2
Groundwater Route Score (S_{gw})	17.73	314.35
Surface Water Route Score (S_{sw})	25.85	668.22
Air Route Score (S_a)	not scored	
$S_{gw}^2 + S_{sw}^2 + S_a^2$		982.57
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		31.35
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		18.12

FIGURE 10
WORKSHEET FOR COMPUTING S_M

Fire and Explosion Work Sheet *not scored*					
Rating Factor	**Assigned Value (Circle One)**	**Multi-plier**	**Score**	**Max. Score**	**Ref. (Section)**
1 Containment	1 3	1		3	7.1
2 Waste Characteristics					7.2
Direct Evidence	0 3	1		3	
Ignitability	0 1 2 3	1		3	
Reactivity	0 1 2 3	1		3	
Incompatibility	0 1 2 3	1		3	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
	Total Waste Characteristics Score			20	
3 Targets					7.3
Distance to Nearest Population	0 1 2 3 4 5	1		5	
Distance to Nearest Building	0 1 2 3	1		3	
Distance to Sensitive Environment	0 1 2 3	1		3	
Land Use	0 1 2 3	1		3	
Population Within 2-Mile Radius	0 1 2 3 4 5	1		5	
Buildings Within 2-Mile Radius	0 1 2 3 4 5	1		5	
	Total Targets Score			24	
4 Multiply 1 x 2 x 3				1,440	
5 Divide line 4 by 1,440 and multiply by 100	S_{FE} =				

FIGURE 11
FIRE AND EXPLOSION WORK SHEET

Direct Contact Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
$\boxed{1}$ Observed Incident	0 45	1	0	45	8.1
If line $\boxed{1}$ is 45, proceed to line $\boxed{4}$ If line $\boxed{1}$ is 0, proceed to line $\boxed{2}$					
$\boxed{2}$ Accessibility	0 1 2 3	1	0	3	8.2
$\boxed{3}$ Containment	0 15	1	15	15	8.3
$\boxed{4}$ Waste Characteristics Toxicity	0 1 2 3	5	10	15	8.4
$\boxed{5}$ Targets					8.5
Population Within a 1-Mile Radius	0 1 2 3 4 5	4	16	20	
Distance to a Critical Habitat	0 1 2 3	4	0	12	
Total Targets Score			16	32	
$\boxed{6}$ If line $\boxed{1}$ is 45, multiply $\boxed{1}$ x $\boxed{4}$ x $\boxed{5}$ If line $\boxed{1}$ is 0, multiply $\boxed{2}$ x $\boxed{3}$ x $\boxed{4}$ x $\boxed{5}$			0	21,600	
$\boxed{7}$ Divide line $\boxed{6}$ by 21,600 and multiply by 100		S_{DC} =	0		

FIGURE 12
DIRECT CONTACT WORK SHEET

HRS REFERENCES

1. Topp, Elizabeth G., 1988. Trip Report - Westclox, Inc. (April 11, 1988). Georgia Department of Natural Resources, Environmental Protection Division.

2. Knowles, Gilda A., 1985. Preliminary Assessment - Westclox, Inc. (GAD057297400). Georgia Department of Natural Resources, Environmental Protection Division.

3. Glass, Gwendolyn, 1985. Trip Report - Westclox, Inc. (May 1, 1985). Georgia Department of Natural Resources, Environmental Protection Division.

4. Barefoot, Howard L., 1985. Notice of Violation of Generator Requirements-Westclox, Inc. (June 10, 1985). Georgia Department of Natural Resources, Environmental Protection Division.

5. Topp, Elizabeth G., 1988. Trip Report - Westclox, Inc. (April 21, 1988). Georgia Department of Natural Resources, Environmental Protection Division.

6. U.S. Geological Survey. Topographic Quadrangles: Nicholson, Georgia (Photorevised 1985), Hull, Georgia (1964), Athens East, Georgia (Photorevised 1986), Athens West, Georgia (Photorevised 1984).

7. Carter, Ralph, City of Athens Water Superintendent. Record of Telephonic Conversation with Elizabeth Topp, Georgia Environmental Protection Division (April 8, 1988).

8. Carter, Ralph, City of Athens Water Superintendent. Record of Telephonic Conversation with Elizabeth Topp, Georgia Environmental Protection Division (April 13, 1988).

9. Robertson, Stanley M., Soil Conservation Service, 1968. Soil Survey of Clarke and Oconee Counties, Georgia. U.S. Department of Agriculture.

10. U.S. Geological Survey, 1984. Ground - Water Data for Georgia. Open - File Report 85-331.

11. Reed, Danny, 1988. Laboratory Report - Westclox, Inc. (April 22, 1988) Georgia Department of Natural Resources, Environmental Protection Division.

12. Code of Federal Regulations, 1987. Uncontrolled Hazardous Waste Site Ranking System; A Users Manual. 40 CFR Part 300, Appendix A.

13. U.S. Department of Interior, Fish and Wildlife Service, 1985. Region 4 Endangered Species Notebook.

FILE

APR 1 1 1989

4WD-SISB

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Frank James
Environmental Control Officer
Westinghouse Electric Corporation
Newton Bridge Road
Athens, Georgia 30613

RE: Westinghouse Electric Corporation
GAD083295144

Dear Mr. James:

The United States Environmental Protection Agency (EPA), pursuant to the authority and requirements of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42, U.S.C. 9605 et seq., as amended by the Superfund Amendments and Reauthorization Act (SARA), Public Law 99-499, is planning to conduct an investigation of the above-referenced site. The Westinghouse Electric Corporation is located on Newton Bridge Road, Athens, Georgia. EPA has reason to believe that there may be a release or threat of a release of hazardous substances from the site into the surrounding environment. The purpose of the investigation is to determine the nature and extent of contamination at the site and to determine what, if any, further response action would be appropriate.

As per my telephone conversation on April 7, 1989 with Harry Bryan, EPA was granted permission for access to your property on or about April 17, 1989 and continuing through the completion of the investigation on or about May 5, 1989. Activities to be conducted during the investigation include:

1. Inspect, sketch, and photograph the premises;

2. Collect surface and subsurface soil samples;

3. Collect groundwater and subsurface water samples;

4. Collect sediment samples;

5. Conduct air monitoring;

6. Tra... ...tation of equipment onto and about the site as necessary to accomplis... ... activities above, including trucks and sampling equipment.

The above sampling activity will be conducted by personnel from EPA Region IV's Field Investigation Team (FIT). Rebecca Hoffman of FIT will contact you prior to the actual site visit to make final arrangements and note any changes.

Split samples will be made available if requested. However, you will be required to furnish your own containers as well as your own laboratory analyses.

If you have any questions, please contact me at (404) 347-5065. Your cooperation in this matter is appreciated.

Sincerely,

Kenneth A. Lucas
Environmental Engineer
EPA Project Manager

cc: Geoffrey Carton, NUS Corporation

KL:aa:04/10/89:Doc access 1/2:5065

KM
4/4

OVERSIZED

DOCUMENT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

JUL 24 1989
4WD-SISB

Mr. Frank Jones
Westinghouse Electric Corporation
Newton Bridge Road
Athens, Georgia 30613

RE: Westinghouse Electric Corporation
Athens, Georgia
GAD003295144

Dear Mr. Jones:

Enclosed is one (1) copy of the analytical results for inorganic and organic analyses of samples collected at the Westinghouse Electric Corporation site.

Should you have any questions, please call me at (404) 347-5065.

Sincerely yours,

MEV 7/21

Mario E. Villamarzo
Georgia Project Officer
WMD, SAS

cc: Rebecca Hoffman, NUS Corporation

YELLOW

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV
ENVIRONMENTAL SERVICES DIVISION
ATHENS, GEORGIA 30613

SISB/SAS
RECEIVED
JUN 19 1989
EPA - REGION IV
ATLANTA, GA.

MEMORANDUM

DATE: June 14, 1989

SUBJECT: Screening Site Inspection Study Plans

FROM: Pat Stamp *Pat Stamp*
Laboratory Quality Control Specialist
Laboratory Evaluation & Quality Assurance Section

TO: Al Hanke, Chief *MH*
Site Assessment Section
Site Investigation & Support Branch, WASTMD

THRU: Wade Knight, Chief
Laboratory Evaluation & Quality Assurance Section

We have reviewed the following subject documents and have no comments:

1. Westinghouse Electric Corp., Athens, GA, Revision 1.
2. Chapel Estates Abandoned Drum Dump, Greer, SC.
3. Old Simpsonville Dump #2, Simpsonville, SC.

NUS CORPORATION

1927 LAKESIDE PARKWAY
SUITE 614
TUCKER, GEORGIA 30084
404-938-7710

Bett Botty –

2

89E

C-586-6-9-20

June 2, 1989

Mr. Doug Lair
Environmental Protection Agency
College Station Road
Athens, Georgia 30613

Subject: Study Plan - Revision 1
Screening Site Inspection - Phase II
[redacted]
TDD No. F4-8903-40

FILE

Bakey

89E

9TFA04D922

245

Dear Mr. Lair:

Enclosed please find two (2) copies of the Study Plan for the Screening Site Inspection that was conducted at the above-referenced site during the week of May 1, 1989.

If you have any questions concerning the project, please contact me at NUS.

Very truly yours,

Rebecca Hoffmann

Rebecca Hoffmann
Project Manager

Approved

RH/dwf

Enclosures (2)

JUN 12 89

NUS
CORPORATION
1927 LAKESIDE PARKWAY
SUITE 614
TUCKER, GEORGIA 30084
404-938-7710

COMPLETE
ENG.

Received
JUN 02 1989
SISB/SAS

C-586-5-9-202

May 31, 1989

Mr. Ken Lucas
Site Investigation and Support Branch
Waste Management Division
Environmental Protection Agency
345 Courtland Street, N. E.
Atlanta, Georgia 30365

Subject: Westinghouse Electric Corporation
Athens, Clarke County, Georgia
TDD No. F4-8903-40

Dear Mr. Lucas:

Previous to the Screening Site Inspection field activities, an onsite reconnaissance was performed at the Westinghouse Electric Corporation landfill. Boundaries of the landfill were identified during the reconnaissance. However, the exact locations of subsurface waste materials were still unknown. Since subsurface soil sampling was scheduled to be conducted at the landfill during the Screening Site Inspection, we wanted to outline accurately waste materials via a geophysical screening. The reason being that site history indicated the presence of buried drums, and we did not intend to auger into the unknown. Exact sampling locations would be determined after delineating subsurface disposal areas.

If you have further questions regarding rationale for the geophysical screening study at Westinghouse, please call me at NUS Corporation.

Very truly yours,

Rebecca Hoffmann

Rebecca Hoffmann
Project Manager

Approved:

Greg Schank

RH/kw

NUS
CORPORATION
1927 LAKESIDE PARKWAY
SUITE 614
TUCKER, GEORGIA 30084
404-938-7710

SISB/SAS
RECEIVED
JUN 12 1989
EPA - REGION IV
ATLANTA, GA

C-586-6-9-21

June 2, 1989

Mr. A.R. Hanke
Site Investigation and Support Branch
Waste Management Division
Environmental Protection Agency
345 Courtland Street, N. E.
Atlanta, Georgia 30365

Subject: Study Plan - Revision 1
Screening Site Inspection - Phase II
Westinghouse Electric Corporation
Athens, Clarke County, Georgia
EPA ID No. GAD003295144
TDD No. F4-8903-89

Dear Mr. Hanke:

Enclosed please find one (1) copy of the Study Plan for the Screening Site Inspection that was conducted at the above-referenced site during the week of May 1, 1989.

If you have any questions concerning the project, please contact me at NUS.

Very truly yours,

Rebecca Hoffmann

Rebecca Hoffmann
Project Manager

Approved

RH/gwn

Enclosure (1)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV
COLLEGE STATION RD.
ATHENS, GA. 30613

*****MEMORANDUM******

DATE: 05/31/89

SUBJECT: Results of Purgeable Organic Analysis;
89-400 WESTINGHOUSE ELECT.
ATHENS GA

FROM: Tom B. Bennett, jr.
Chief, Organic Chemistry Section

TO: PHIL BLACKWELL

Attached are the results of analysis of samples collected as part of the subject project.

If you have any questions please contact me.

ATTACHMENT

NUS CORPORATION
1927 LAKESIDE PARKWAY
SUITE 614
TUCKER, GEORGIA 30084
404-938-7710

COMPLETE
ENG.

Received
JUN 02 1989
SISB/SAS

C-586-5-9-202

May 31, 1989

Mr. Ken Lucas
Site Investigation and Support Branch
Waste Management Division
Environmental Protection Agency
345 Courtland Street, N. E.
Atlanta, Georgia 30365

Subject: Westinghouse Electric Corporation
Athens, Clarke County, Georgia
TDD No. F4-8903-40

Dear Mr. Lucas:

Previous to the Screening Site Inspection field activities, an onsite reconnaissance was performed at the Westinghouse Electric Corporation landfill. Boundaries of the landfill were identified during the reconnaissance. However, the exact locations of subsurface waste materials were still unknown. Since subsurface soil sampling was scheduled to be conducted at the landfill during the Screening Site Inspection, we wanted to outline accurately waste materials via a geophysical screening. The reason being that site history indicated the presence of buried drums, and we did not intend to auger into the unknown. Exact sampling locations would be determined after delineating subsurface disposal areas.

If you have further questions regarding rationale for the geophysical screening study at Westinghouse, please call me at NUS Corporation.

Very truly yours,

Rebecca Hoffmann

Rebecca Hoffmann
Project Manager

RH/kw

Approved:

Greg Schank

FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-...
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS ...
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATI...

05/30/89

...TED BY: R YOUNG
ST: GA
...ON START: 05/04/89 1035 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
	...ANE
	...ICHLOROFLUOROMETHANE
...UUU	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
1600U	ACETONE
1600U	CARBON DISULFIDE
160U	METHYLENE CHLORIDE
160U	TRANS-1,2-DICHLOROETHENE
160U	1,1-DICHLOROETHANE
1600U	VINYL ACETATE
160U	CIS-1,2-DICHLOROETHENE
160U	2,2-DICHLOROPROPANE
1600U	METHYL ETHYL KETONE
160U	BROMOCHLOROMETHANE
160U	CHLOROFORM
160U	1,1,1-TRICHLOROETHANE
160U	1,1-DICHLOROPROPENE
160U	CARBON TETRACHLORIDE
160U	1,2-DICHLOROETHANE
160U	BENZENE
160U	TRICHLOROETHENE(TRICHLOROETHYLENE)
160U	1,2-DICHLOROPROPANE
160U	DIBROMOMETHANE
160U	BROMODICHLOROMETHANE
160U	CIS-1,3-DICHLOROPROPENE
1600U	METHYL ISOBUTYL KETONE
160U	TOLUENE
160U	TRANS-1,3-DICHLOROPROPENE
160U	1,1,2-TRICHLOROETHANE
160U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
160U	1,3-DICHLOROPROPANE
1600U	METHYL BUTYL KETONE
160U	DIBROMOCHLOROMETHANE
160U	CHLOROBENZENE
160U	1,1,1,2-TETRACHLOROETHANE
160U	ETHYL BENZENE
160U	(M- AND/OR P-)XYLENE
81J	O-XYLENE
160U	STYRENE
160U	BROMOFORM
160U	BROMOBENZENE
160U	1,1,2,2-TETRACHLOROETHANE
160U	1,2,3-TRICHLOROPROPANE
160U	O-CHLOROTOLUENE
160U	P-CHLOROTOLUENE
160U	1,3-DICHLOROBENZENE
160U	1,4-DICHLOROBENZENE
160U	1,2-DICHLOROBENZENE
33.0	PERCENT MOISTURE

REMARKS***

REMARKS

FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/30/89

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SS-03 SURFACE SOIL #03 COLLECTION START: 05/04/89 1035 STOP: 00/00/00 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

200JN	TRIMETHYLBENZENE
N	PETROLEUM PRODUCT

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

NUS CORPORATION

1927 LAKESIDE PARKWAY
SUITE 614
TUCKER, GEORGIA 30084
404-938-7710

COMPLETE
ENG.

Received
JUN 02 1989
SISB/SAS

C-586-5-9-202

May 31, 1989

Mr. Ken Lucas
Site Investigation and Support Branch
Waste Management Division
Environmental Protection Agency
345 Courtland Street, N. E.
Atlanta, Georgia 30365

Subject: Westinghouse Electric Corporation
Athens, Clarke County, Georgia
TDD No. F4-8903-40

Dear Mr. Lucas:

Previous to the Screening Site Inspection field activities, an onsite reconnaissance was performed at the Westinghouse Electric Corporation landfill. Boundaries of the landfill were identified during the reconnaissance. However, the exact locations of subsurface waste materials were still unknown. Since subsurface soil sampling was scheduled to be conducted at the landfill during the Screening Site Inspection, we wanted to outline accurately waste materials via a geophysical screening. The reason being that site history indicated the presence of buried drums, and we did not intend to auger into the unknown. Exact sampling locations would be determined after delineating subsurface disposal areas.

If you have further questions regarding rationale for the geophysical screening study at Westinghouse, please call me at NUS Corporation.

Very truly yours,

Rebecca Hoffmann

Rebecca Hoffmann
Project Manager

RH/kw

Approved:

Greg Schank

R-586-4-9-13

STUDY PLAN
SCREENING SITE INSPECTION
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA
EPA ID #: GAD003295144

Prepared Under
TDD No. F4-8903-40
CONTRACT NO. 68-01-7346

Revision 1

FOR THE

WASTE MANAGEMENT DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

May 26, 1989

NUS CORPORATION
SUPERFUND DIVISION

Prepared By	Reviewed By	Approved By
Rebecca A. Hoffmann		
Rebecca A. Hoffmann Project Manager	Phil Blackwell Assistant Regional Project Manager	Murray Warner, P.E. Regional Project Manager

NOTICE

TABLE OF CONTENTS

FIGURES

TABLES

STUDY PLAN
SCREENING SITE INSPECTION
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA
EPA ID #GAD003295144
TDD NO. F4-8903-40

1.0 INTRODUCTION

The NUS Corporation Region 4 Field Investigation Team (FIT) has been tasked by the U.S. Environmental Protection Agency (EPA), Waste Management Division to conduct a Screening Site Inspection (SSI) at the Westinghouse Electric Corporation facility in Athens, Clarke County, Georgia. The investigation will be performed under the authority of the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA). The task will be performed to satisfy the requirements stated in Technical Directive Document (TDD) number F4-8903-40.

1.1 Objectives

The objectives of this sampling investigation are to collect information to assist in developing a site-specific preliminary HRS score and to determine if further investigation is required at this site.

Specific elements are:

- Obtain information to prepare a site specific preliminary HRS
- Provide EPA the necessary information to make decisions on any other actions warranted at the site.

1.2 Scope of Work

The scope of this investigation will include the following activities:

- Obtain and review background materials relevant to HRS scoring of site
- Obtain aerial photographs and maps of site, if possible
- Obtain information on local water systems
- Evaluate target population within a 4-mile radius of the site with regard to groundwater use, surface water use, and possibility of direct contact or fire and explosion hazard
- Conduct a survey of private wells
- Determine location and distance to nearest potable well
- Develop a site sketch
- Conduct a geophysical screening of site to determine areas of potential waste burial, if applicable
- Collect environmental samples

1.3 Schedule

Week of May 1, 1989

1.4 Personnel

Project Manager - Rebecca Hoffmann
Other personnel: Donnie McCurry
Phillip Henderson
Ron Wilde

1.5 Permits and Authorization Requirements

EPA is responsible for obtaining access to the site and permission to take photographs of site. In addition, EPA is responsible for all permits which may be required to accomplish this task.

1.6 Site History and Description

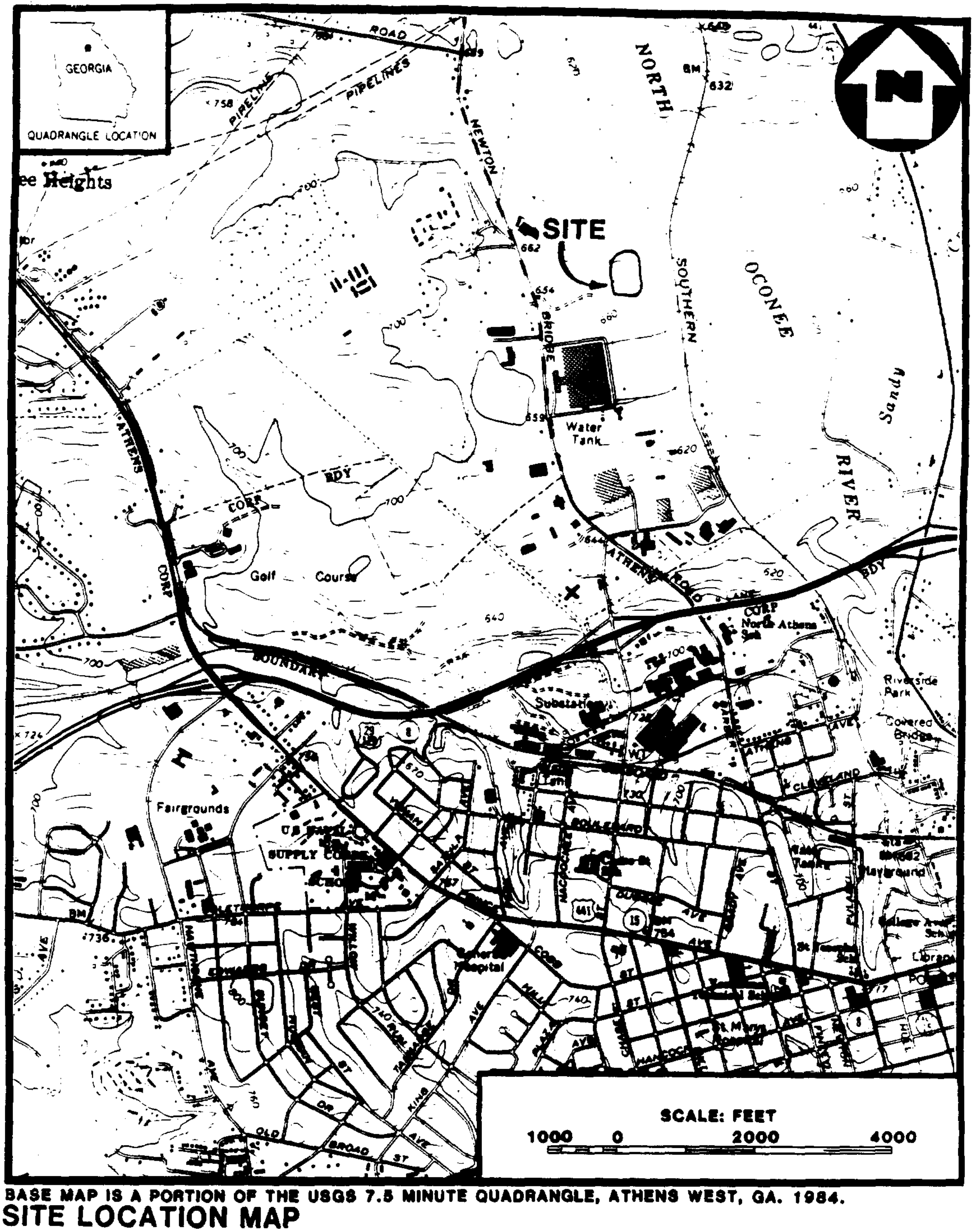
The Westinghouse Electric Corporation is located approximately 1 mile north of Athens, Clarke County, Georgia (Refs. 1, 2) (Figure 1). The Westinghouse landfill is located 800 feet north of the northeast corner of the facility, and is approximately one acre (Ref. 1) (Figure 2).

Westinghouse Electric manufactures and repairs overhead distribution transformers. Between the years of 1958 and 1970, wastes including paint and enamel filter media, waste oil, paint, paint solvents, acid cleaners and sludge from cleaning out tanks were disposed of in the landfill. It is believed that the wastes were containerized in fiber containers, 5-gallon and 55-gallons metal drums prior to disposal (Ref. 10). Sometime after 1970 the landfill was backfilled, and the site is now heavily vegetated (Ref. 3).

1.7 Regional Hydrogeology

The site is located in the Piedmont physiographic province. The rocks underlying this province are massive igneous and metamorphic rocks of relatively low permeability (Ref. 4, pp. 4, 5). The Athens area has a relatively mild climate. Temperatures average 42°F in January, and 79°F in July (Ref. 5, p. 2). Average annual rainfall is 48 inches (Ref. 6, p. 43). There are two periods of peak rainfall, one in the late winter and one in mid-summer (Ref. 5, p. 5). Net annual precipitation is 7 inches (Ref. 6, pp. 43, 63).

The aquifer used in the study area can be characterized as a crystalline rock aquifer. In this aquifer, groundwater is stored in the unconsolidated material overlying the crystalline rock and within fractures that have formed in the crystalline rock (Ref. 4, p. 12). The residual soils (Regolith) overlying bedrock are capable of storing large quantities of groundwater and well yields are generally highest in areas that have a thick regolith that is saturated with water (Ref. 7, pp. 8-11).

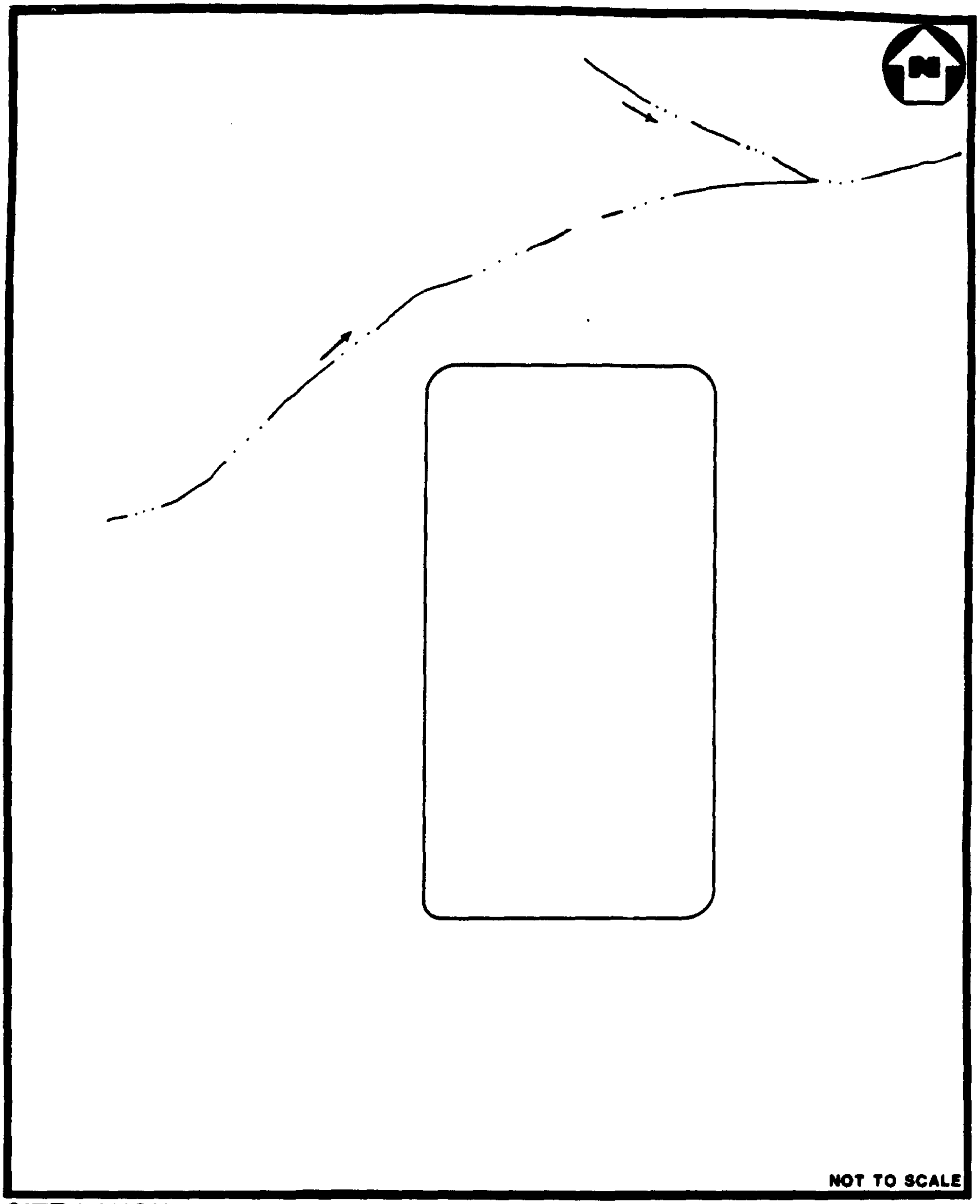


BASE MAP IS A PORTION OF THE USGS 7.5 MINUTE QUADRANGLE, ATHENS WEST, GA. 1984.

SITE LOCATION MAP
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, GEORGIA

FIGURE-1

NUS CORPORATION



SITE LAYOUT MAP
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, GEORGIA

FIGURE-2

NUS CORPORATION

The site is underlain by amphibolite interlayered with biotite schist and biotite gneiss. Wells intercepting contact zones between these rock units often have increased permeability as do wells that intersect fault zones. Well yields range from 20 to 225 gallons per minute, with an average yield of 52 gallons per minute. The average depth of wells in the Athens area is 246 feet with a typical casing depth of 69 feet (Ref. 7, plate 1). Few wells are completed to depths greater than 400 feet due to a decrease in the size and number of fractures within the rock below this depth (Ref. 7, p. 9).

Groundwater recharge occurs in topographic highs and groundwater discharge occurs in topographically low areas. The depth to the water table is also dependent on local topography. The water table may be at or near land surface in stream valleys. However, on steep hills or narrow ridges the depth to the water table may be much greater (Ref. 7, p. 11).

Groundwater flow in the regolith is unconfined and follows local topographic gradients (Ref. 7, p. 11). Groundwater flow within fractures of the underlying crystalline rock is influenced by fracture orientation. Wells penetrating deeper fracture systems may intercept groundwater that is under confined conditions.

There are private wells utilizing the aquifer in Clarke County. However, none could be identified within a 4-mile site radius.

The municipal water supply is drawn from two water intakes and serves 23,000 connections. One intake is located on the Middle Oconee River approximately 3.2 miles southwest of the site. It is not downstream from the site. The other intake is located on the North Oconee River 2.6 downstream miles from the site.

2.0 GEOPHYSICAL SCREENING

A geophysical screening will be conducted at the site for the purposes of delineating the landfilled portion of the site. Since the exact location of waste disposal is unknown it is felt that geophysical techniques provide the most viable alternative for locating subsurface waste materials associated with these areas. The most suitable geophysical techniques applicable in this geologic setting are believed to be electromagnetics and/or magnetics. If proper subsurface conditions exist at the site these techniques will provide the necessary data needed to accurately define any subsurface waste materials. The results will then be used in determining optimum sampling locations.

Instruments to be used will include a non-contacting ground conductivity meter (Geonics-EM-31) and a proton precession magnetometer (Geometrics - G-856). A summary of geophysical methods is provided in Appendix A.

3.0 SAMPLING INVESTIGATION

The sampling investigation will include the collection of surface soil, subsurface soil, surface water, sediment and groundwater samples. Samples will be analyzed for the complete Target Compound List (TCL) and analyses will be performed under the Contract Laboratory program (CLP).

3.1 Surface Soil Sampling

Four surface soil samples will be collected, including a background sample taken southwest of the landfill. Sample codes and descriptions are present in Table 1. The locations of the proposed samples are shown in Figure 3.

3.2 Subsurface Soil Sampling

Four subsurface samples will be collected including a background as described in Table 1. Three subsurface soil samples will be collected from the suspected disposal area.

3.3 Surface Water and Sediment Sampling

Two surface water and two sediment samples will be collected from an unnamed creek along the drainage pathway. Two surface water and two sediment samples will be collected to establish background conditions. Sample codes and descriptions are provided in Table 1. Sample locations are shown in Figure 3.

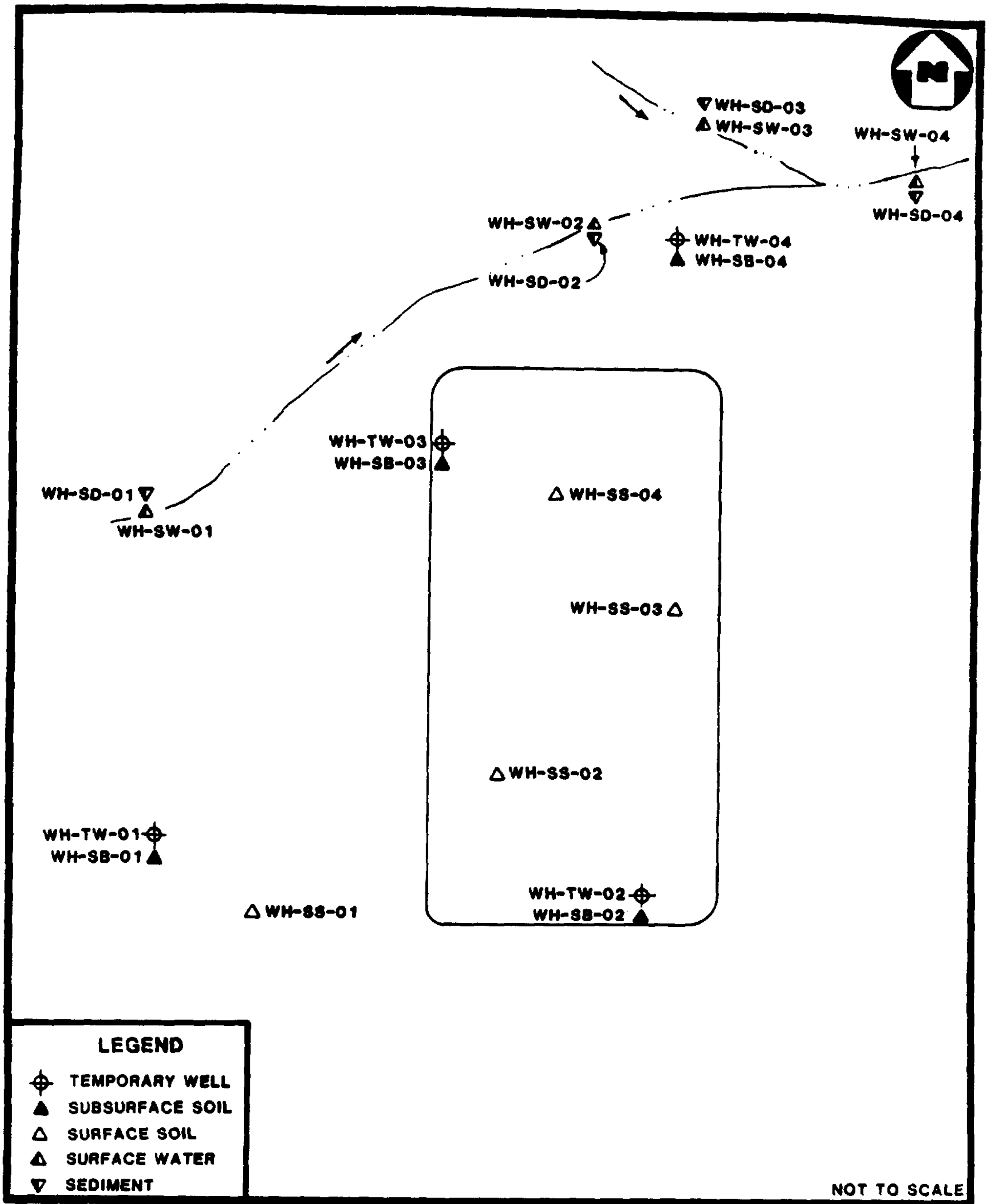
3.4 Groundwater Sampling

Four groundwater samples will be collected from the locations shown in Figure 3. A background sample will be collected from a temporary well located upgradient of the site. Three groundwater samples will be collected from temporary wells located in the suspected disposal areas.

TABLE 1

SAMPLE CODES, DESCRIPTIONS, AND LOCATIONS
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

Sample Code	Description	Location/Rationale
WH-TW-01	Groundwater	Offsite - characterize background conditions
WH-TW-02	Groundwater	Onsite-determine presence or absence of contamination
WH-TW-03	Groundwater	Onsite-determine presence or absence of contamination
WH-TW-04	Groundwater	Onsite-determine presence or absence of contamination
WH-SS-01	Surface Soil	Offsite - characterize background conditions
WH-SS-02	Surface Soil	Onsite-determine presence or absence of contamination
WH-SS-03	Surface Soil	Onsite-determine presence or absence of contamination
WH-SS-04	Surface Soil	Onsite-determine presence or absence of contamination
WH-SB-01	Subsurface Soil	Offsite - characterize background conditions
WH-SB-02	Subsurface Soil	Onsite-determine presence or absence of contamination
WH-SB-03	Subsurface Soil	Onsite-determine presence or absence of contamination
WH-SB-04	Subsurface Soil	Onsite-determine presence or absence of contamination
WH-SD-01	Sediment	Offsite - characterize background conditions
WH-SD-02	Sediment	Drainage pathway-determine presence or absence of contamination
WH-SD-03	Sediment	Drainage pathway-determine presence or absence of contamination
WH-SD-04	Sediment	Drainage pathway-determine presence or absence of contamination
WH-SW-01	Surface Water	Offsite - characterize background conditions
WH-SW-02	Surface Water	Drainage pathway-determine presence or absence of contamination
WH-SW-03	Surface Water	Drainage pathway-determine presence or absence of contamination
WH-SW-04	Surface Water	Drainage pathway-determine presence or absence of contamination



SAMPLE LOCATION MAP
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, GEORGIA

FIGURE-3

NUS CORPORATION

3.5 Analytical and Container Requirements

Sample containers used will be in accordance with the requirements specified in the Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division, April 1, 1986. The following is a description of the analysis and types of containers required.

Analyses	Container	Preservatives**
Ext. Organics, Water	1 gal., amber glass*	None
Volatile Organics, Water	40 ml., glass vial*	4 drops conc. HCL to pH <2
Metals, Water	1 liter, plastic	50% HNO_3 to pH <2
Cyanide, Water	1 liter, plastic	NaOH to pH >12
Ext. Organics, Soil/Sediment	8 oz., glass*	None
Volatile Organics Soil/Sediment	4 oz., glass*	None
Inorganics, Soil/Sediment	8 oz., glass*	None

* Sample container lids are lined with teflon.

** All samples will be iced to 4oC upon collection.

3.6 Methodology

All sample collection, sample preservation, and chain-of-custody procedures used during this investigation will be in accordance with the standard operating procedures as specified in Section 3 and 4 of the Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division, April 1, 1986.

All laboratory analyses and laboratory quality assurance procedures used during this investigation will be in accordance with standard procedures and protocols as specified in the Analytical Support Branch Operations and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division; revised June 1, 1985 or as specified by the existing United States Environmental Protection Agency standard procedures and protocols for the contract analytical laboratory program.

REFERENCES

1. EPA Notification of Hazardous Waste site (EPA Form 8900-1) for Westinghouse Electric Corporation, Athens, Georgia. Filed by E. J. Fogel, Plant Manager, December 13, 1988.

2. U. S. Geological Survey, 7.5 minute series Topographic Quadrangle Map of Georgia: Athens West 1964 (photorevised 1984).

3. Frank James, Environmental Control Officer for Westinghouse Electric Corporation, telephone conversations with Rebecca Hoffmann, NUS Corporation, April 10, 1989. Subject: location of landfill.

4. J. S. Clarke, et al, Groundwater data for Georgia 1986. U. S. Geological Survey OFR-87-376.

5. National Climatic Center, Monthly Normals of Temperature, Precipitation, and Heating and Cooling Degree Days 1951-80 Georgia. National Oceanic and Atmospheric Administration, Environmental Data and Information Service, 1982.

6. U. S. Department of Commerce, Climatic Atlas of the United States, (Washington, D.C.: GPO, June 1968). Reprint: 1988, National Oceanic and Atmospheric Administration.

7. Dean B. Radtke et al, Occurrence and Availability of Groundwater in the Athens Region, Northeastern Georgia. U. S. Geological Survey Water Resources Investigations Report 86-4075.

8. U. S. Geological Survey, National Water Summary 1984. U. S. Geological Survey Water Supply Paper 2275.

HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

WESTINGHOUSE ELECTRIC CORPORATION/ATHENS
EPA SITE NUMBER GAD003295144
ATHENS
CLARKE COUNTY, GA
EPA REGION: 4

SCORE STATUS: IN PREPARATION

SCORED BY R.HOFFMANN
OF NUS CORPORATION
ON 05/22/90

DATE OF THIS REPORT: 05/22/90
DATE OF LAST MODIFICATION: 05/22/90

GROUND WATER ROUTE SCORE	:	19.05
SURFACE WATER ROUTE SCORE	:	38.67
AIR ROUTE SCORE	:	0.00
MIGRATION SCORE	:	24.92

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV
COLLEGE STATION RD.
ATHENS, GA. 30613

SISB / SAS
RECEIVED
MAY 31 1989
EPA - REGION IV
ATLANTA, GA.

*****MEMORANDUM******

DATE: 05/19/89

SUBJECT: Results of Cyanide Analysis;
89-400 WESTINGHOUSE ELECT.
ATHENS GA

FROM: William H. McDaniel
Chief, Inorganic Chemistry Section

TO: PHIL BLACKWELL

Attached are the results of analysis of samples collected as part of the subject project.

If you have any questions please contact me.

ATTACHMENT

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

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*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
**   PROJECT NO. 89-400    SAMPLE NO. 34899  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R YOUNG                   **
**   SOURCE: WESTINGHOUSE ELECT.                                      CITY: ATHENS                ST: GA                       **
**   STATION ID: SB-02 SUBSURFACE SOIL #2                             COLLECTION START: 05/04/89  1005   STOP: 00/00/00        **
**                                                                                                                             **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 89-400   SAMPLE NO. 34900   SAMPLE TYPE: SOIL   PROG ELEM: NSF   COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT.   CITY: ATHENS   ST: GA
STATION ID: SS-02 SURFACE SOIL #02   COLLECTION START: 05/04/89 1020   STOP: 00/00/00

RESULTS	UNITS	PARAMETER
0.25	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 89-400   SAMPLE NO. 34901  SAMPLE TYPE: SOIL      PROG ELEM: NSF   COLLECTED BY: R YOUNG                **
**   SOURCE: WESTINGHOUSE ELECT.                                   CITY: ATHENS               ST: GA                    **
**   STATION ID: SS-03 SURFACE SOIL #03                            COLLECTION START: 05/04/89  1035   STOP: 00/00/00   **
**                                                                                                                        **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
0.30U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SS-04 SURFACE SOIL #04 COLLECTION START: 05/04/89 1120 STOP: 00/00/00 **
** **
*** ***

RESULTS	UNITS	PARAMETER
1.2	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

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**  PROJECT NO. 89-400   SAMPLE NO. 34903  SAMPLE TYPE: SOIL       PROG ELEM: NSF   COLLECTED BY: R YOUNG                  **
**  SOURCE: WESTINGHOUSE ELECT.                                    CITY: ATHENS                 ST: GA                     **
**  STATION ID: SB-03 SUBSURFACE SOIL #03                          COLLECTION START: 05/04/89  1225   STOP: 00/00/00       **
**                                                                                                                         **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
0.33	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 89-400    SAMPLE NO. 34904  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R YOUNG              **
**   SOURCE: WESTINGHOUSE ELECT.                                      CITY: ATHENS              ST: GA                     **
**   STATION ID: SS-01 BACKGROUND SURFACE SOIL                        COLLECTION START: 05/03/89  1530   STOP: 00/00/00    **
**                                                                                                                         **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 89-400    SAMPLE NO. 34905  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R YOUNG            **
**   SOURCE: WESTINGHOUSE ELECT.                                      CITY: ATHENS                ST: GA               **
**   STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL                     COLLECTION START: 05/03/89  1550   STOP: 00/00/00 **
**                                                                                                                    **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
0.26U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SD-01 BACKGROUND SEDIMENT SOIL COLLECTION START: 05/03/89 1630 STOP: 00/00/00

RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SD-02 SEDIMENT SOIL #02 COLLECTION START: 05/03/89 1815 STOP: 00/00/00 **
** **
*** ***

RESULTS	UNITS	PARAMETER
0.36U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

TABLE 2

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (mg/kg)	Background	Onsite		
	WH-SS-01	WH-SS-02	WH-SS-03	WH-SS-04
ALUMINUM	30,000	19,000	28,000	18,000
ANTIMONY	-	-	-	100
BARIUM	160	92	130	9000
CALCIUM	-	2200	-	1800
CHROMIUM	14	28	2400	8700
COBALT	15	5.9	-	55
COPPER	7.5	51	23,000	9900
IRON	26,000	14,000	29,000	29,000
LEAD	25	140	10,000	9000
MAGNESIUM	8300	1900	3500	1000
MANGANESE	800	320	500	210
MERCURY	-	-	0.05	0.10
NICKEL	-	6	-	58
POTASSIUM	7800	1800	-	-
VANADIUM	61	43	70	46
ZINC	53	100	3000	10,000
CYANIDE	-	0.25	-	1.2
TITANIUM	1800	710	1100	170
YTTRIUM	14	13	-	-
STRONTIUM	-	8.2	-	120

- Material analyzed for but not detected above minimum quantitation limit

TABLE 3

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SUBSURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (mg/kg)	Background	Onsite	Downgradient
	WH-SB-01	WH-SB-02	WH-SB-03
ALUMINUM	27,000	55,000	50,000
BARIUM	26	90	60
CALCIUM	-	580	290
CHROMIUM	29	34	56
COBALT	-	-	15
COPPER	34	22	13
IRON	45,000	53,000	34,000
LEAD	29	42	21
MAGNESIUM	1100	2100	1200
MANGANESE	250	310	1300
MERCURY	-	-	0.1
NICKEL	14	-	11
POTASSIUM	1100	2500	1200
VANADIUM	120	150	81
ZINC	26	31	40
CYANIDE	-	-	0.33
TITANIUM	940	1900	1200
YTTRIUM	9.7	-	-

\- Material analyzed for but not detected above minimum quantitation limit

TABLE 4

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SEDIMENT SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (mg/kg)	Background WH-SD-01	Downgradient WH-SD-02
ALUMINUM	4400	46,000
BARIUM	21	180
CALCIUM	150	1200
CHROMIUM	15	47
COBALT	-	18
COPPER	3.9	30
IRON	16,000	50,000
LEAD	6.3	45
MAGNESIUM	710	1900
MANGANESE	150	4500
POTASSIUM	820	1400
VANADIUM	42	120
ZINC	12	57
TITANIUM	410	1000
YTTRIUM	7.1	25
STRONTIUM	-	12

\- Material analyzed for but not detected above minimum quantitation limit

Sample WH-SS-03 contained 130 mg/kg of fatty acids or fatty acid derivatives, tentatively identified with estimated concentrations ranging from 40 to 2000 mg/kg. Fatty acids are components of drawing and rolling compounds (greases). This sample also contained an estimated 80 ug/kg xylene (2 x MQL) and a total estimated concentration of 75 mg/kg of seven tentatively identified alkyl benzenes, which are components of kerosenes and other solvents. This sample also contained a significant concentration of PCBs, 1100 ug/kg Aroclor 1242 (18 x MQL) and an estimated 350 ug/kg tentatively identified Aroclor 1260 (5.6 x MQL) and smaller concentrations of Aldrin, Dieldrin, and 4,4'-DDD.

Sample WH-SS-04 contained a total of over 22,000 mg/kg (2.2%) of alkyl substituted benzenes, including 1100 mg/kg ethyl benzene (28,200 x MQL) and 7100 mg/kg xylenes (182,000 x MQL). These are solvents used by Westinghouse in the manufacturing process and listed as components of the waste streams. The other substituted benzenes, tentatively identified with estimated concentrations ranging from 10 to 6000 mg/kg, are components of kerosene and fuel oils. This sample contained a total concentration of 2400 mg/kg PNAs including 620 mg/kg naphthalene (365 x MQL) and 240 mg/kg 2-methylnaphthalene (141 x MQL), 6200 mg/kg of fatty acids, 560 mg/kg phenols (antioxidant, surfactant, wood preservative, and insecticide) including 180 mg/kg 4-nitrophenol (54 x MQL) and 180 mg/kg 2, 4-dinitrophenol (54 x MQL), 290 mg/kg nonaromatic hydrocarbons, and 2000 mg/kg unidentified compounds and petroleum product. The contaminants in this sample are components of kerosene, solvents, and lubricants.

Sediment sample WH-SD-02 contained an estimated 6000 ug/kg of hexadecanoic acid (3 x background) and an estimated 700 ug/kg of octadecanoic acid (tentatively identified) and petroleum product.

Results of subsurface soil samples revealed no analytical significant contamination of organic constituents.

Organic analytical results can be found in Tables 5, 6, and 7.

TABLE 5

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (ug/kg)	Backgroun	Onsite		
	WH-SS-01	WH-SS-02	WH-SS-03	WH-SS-04
PURGEABLE COMPOUNDS				
ETHYL BENZENE	-	-	-	1 100,000
(M- AND/OR P-)XYLENE	-	-	-	17,000,000
O-XYLENE	-	-	81J	5.400,000
TRIMETHYLBENZENE	-	-	200JN	5,000,000JN/
PETROLEUM PRODUCT	-	-	N	-
EXTRACTABLE COMPOUNDS				
NAPHTHALENE	-	-	-	620,000
2-METHYLNAPHTHALENE	-	-	-	240,000
ACENAPHTHYLENE	-	2800J	-	-
4-NITROPHENOL	-	-	-	180,000
2,4-DINITROPHENOL	-	-	-	180,000
PHENANTHRENE	-	16,000	-	13,000J
ANTHRACENE	-	5200J	-	-
FLUORANTHENE	-	78,000	-	-
PYRENE	-	67,000	-	-
BENZO(A)ANTHRACENE	-	28,000	-	-
CHRYSENE	-	25,000	-	-
BENZO(B AND/OR	-	51,000	-	-
BENZO-A-PYRENE	-	24,000	-	-
INDENO (1,2,3-CD) PYRENE	-	10,000J	-	-
DIBENZO(A,H)ANTHRACENE	-	3700J	-	-
BENZO(GHI)PERYLENE	-	9500J	-	-
HEXADECANOIC ACID	1000JN	-	2E6JN	4E6JN
OCTADECANOIC ACID	-	-	700,000JN	1E6JN
(DIMETHYLBUTENYLIDENE)BISBEN	-	2000JN	-	-
METHYLPHENANTHRENE	-	2000JN	-	-
CYCLOPENTAPHENANTHRENE	-	6000JN	-	-
PHENYLNAPHTHALENE	-	3000JN	-	-

- Material analyzed for but not detected above minimum quantitation limit
J Estimated value
N Presumptive evidence of presence of material

TABLE 5

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (ug/kg)	Backgroun	Onsite		
	WH-SS-01	WH-SS-02	WH-SS-03	WH-SS-04
BIS(BUTADIYNEDIYL)BENZENE	-	2000JN	-	-
BENZONAPHTHOFURAN	-	9000JN/3	-	-
PHENANTHRENECARBONITRILE	-	3000JN	-	-
METHYLFLUORANTHENE	-	20,000JN/4	-	-
BENZOFLUORENE	-	8000JN	-	-
BENZONAPHTHOTHIOPHENE	-	7000JN	-	-
BENZOFLUORANTHENE (NOT B OR	-	40,000JN/2	-	-
BENZOPHENANTHRENONE	-	2000JN	-	-
TETRADECANOIC ACID	-	-	200,000JN	200,000JN
METHYLPROPYLBENZENE	-	-	5000JN	900,000JN
DIETHYLMETHYLBENZENE	-	-	9000JN/2	100,000JN
(DIMETHYLPROPYL)BENZENE	-	-	6000JN	1E6JN/6
DIMETHYL(METHYLETHYL)BENZENE	-	-	10,000JN/2	1E6JN/6
ETHYLTRIMETHYLBENZENE	-	-	4000JN	100,000JN
HEXANOIC ACID	-	-	6000JN	-
COPAENE	-	-	3000JN	-
HEPTADECANOL	-	-	40,000JN/2	-
PENTADECANOIC ACID	-	-	40,000JN	-
TETRADECANAL	-	-	40,000JN	-
HEPTADECANOIC ACID	-	-	100,000JN	-
ETHYLDIMETHYLBENZENE	-	-	40,000JN/5	6E6JN/7
PROPYCYCLOHEXANE	-	-	-	10,000JN
PROPYLBENZENE	-	-	-	30,000JN
ETHYLMETHYLBENZENE	-	-	-	200,000JN/3
TRIMETHYLBENZENE	-	-	-	900,000JN/3
PROPENYLCYCLOHEXANE	-	-	-	200,000JN
DIHYDROINDENE	-	-	-	100,000JN
(METHYLPROPYL)BENZENE	-	-	-	20,000JN
BUTYLBENZENE	-	-	-	600,000JN

- Material analyzed for but not detected above minimum quantitation limit

J Estimated value

N Presumptive evidence of presence of material

TABLE 5

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (ug/kg)	Backgroun	Onsite		
	WH-SS-01	WH-SS-02	WH-SS-03	WH-SS-04
METHYLDECAHYDRONAPHTHALENE	-	-	-	20,000JN
PENTYCYCLOHEXANE	-	-	-	30,000JN
METHYLDIHYDROINDENE	-	-	-	700,000JN
DIETHYLBENZENE	-	-	-	1E6JN
TETRADYDRONAPHTHALENE	-	-	-	200,000JN
((METHYLBENZYL)SULFONYL)PHEN	-	-	-	100,000JN
DIMETHYDIHYDROINDENE	-	-	-	200,000JN/2
DIMETHYL(METHYLPROPYL)BENZEN	-	-	-	90,000JN/2
1-METHYLNAPHTHALENE	-	-	-	60,000JN
DIMETHYLNAPHTHALENE	-	-	-	20,000JN
HEXAMETHYLOCTAHYDROINDENE	-	-	-	100,000JN
BIS(DIMETHLETHYL)METHYLPHENO	-	-	-	100,000JN
TRIMETHYLNAPHTHALENE	-	-	-	20,000JN/2
METHYL(METHYLETHYL)NAPHTHALE	-	-	-	30,000JN
DIMETHYLPHENANTHRENE	-	-	-	30,000JN
HEXADECENOIC ACID	-	-	-	1E6JN
ETHYL(METHYLETHYL)BENZENE	-	-	-	2E6JN
METHYLPROPYLCYCLOHEXANE	-	-	-	50,000JN/2
PETROLEUM PRODUCT	-	-	N	N
UNIDENTIFIED COMPOUNDS/NO	-	200,000J/2	2E6JN/11	2E6J/10
PESTICIDE\PCB COMPOUNDS				
ALDRIN	-	-	48	23
DIELDRIN	-	-	43J	66
4,4'-DDD (P,P'-DDD)	-	-	74	-
PCB-1242 (AROCLOR 1242)	-	-	1100	-
PCB-1260 (AROCLOR 1260)	-	-	350JN	-

- Material analyzed for but not detected above minimum quantitation limit
J Estimated value
N Presumptive evidence of presence of material

TABLE 6

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SUBSURFACE SOIL SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (ug/kg)	Background WH-SB-01	Onsite WH-SB-02	Downgradient WH-SB-03
EXTRACTABLE COMPOUNDS			
BENZO(B AND/OR K)FLUORANTHENE	-	170J	-
HEXADECANOIC ACID	5000JN	-	5000JN
OCTADECANOIC ACID	400JN	-	700JN
TETRADECANOIC ACID	-	-	200JN
PESTICIDE\PCB COMPOUNDS			
4,4'-DDT (P,P'-DDT)	-	8.1J	-

- Material analyzed for but not detected above minimum quantitation limit
J Estimated value
N Presumptive evidence of presence of material

TABLE 7

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SEDIMENT SAMPLES
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

PARAMETERS (ug/kg)	Background WH-SD-01	Downgradient WH-SD-02
EXTRACTABLE COMPOUNDS		
HEXADECANOIC ACID	2000JN	6000JN
OCTADECANOIC ACID	-	700JN
PETROLEUM PRODUCT	-	N

- \- Material analyzed for but not detected above minimum quantitation limit
- J Estimated value
- N Presumptive evidence of presence of material

5.0 SUMMARY

The operations at the WEC facility included manufacturing and repairing overhead distribution transformers, a process that has been conducted since 1958. The results of this investigation revealed the presence of organic and inorganic contaminants, consistent with the WEC operations, in surface soil samples in excess of background conditions. Access to the site could be obtained by nearby residents, and the uncontained contaminated surface soils could be dispersed by the wind. Potentially affected targets include employees at the WEC facility and adjacent industrial properties and the 486 residents residing within a 1-mile radius of the site. Also, the population within the 4-mile site radius is estimated at 49,884.

The results of sediment sampling at the confluence of the swampy region and the North Oconee River revealed the presence of ten inorganic contaminants with significantly higher concentrations than background conditions. Although there were no visibly discernable pathways for surface water migration from the landfill, contaminant migration from the site may be possible during heavy rainfall. One of the municipal surface water intakes for the city of Athens is located 2.65 stream miles from the WEC landfill. The municipal system serves approximately 98,800 persons. Other possible explanations for the presence of the inorganic contaminants could be infiltration of surface water runoff to groundwater or the influence of industrial properties located north and adjacent to the swampy region.

The groundwater pathway is not a concern due to the lack of potentially affected targets. However, because the potentially affected population is large for the surface water pathway, and there are potentially affected targets for the surface water, air and onsite pathways, FIT 4 recommends a Listing Site Inspection, Phase I, be conducted at the WEC landfill.

REFERENCES

1. Potential Hazardous Waste Site Preliminary Assessment (EPA Form 2070-12) and attachments for Westinghouse Electric Corporation. Filed by Gilda Knowles, Georgia Department of Natural Resources, September 20, 1985.

2. EPA Notification of Hazardous Waste Site (EPA Form 8900-1) for Westinghouse Electric Corporation, Athens, Clarke County, Georgia. Filed by E.J. Fogel, Plant Manager, December 13, 1988.

3. Samuel R. Pitts, Vice-President, Environmental Affairs, Westinghouse Electric Corporation, Pittsburg, Pennsylvania, letter to USEPA, December 20, 1988. Subject: EPA Notification of Hazardous Waste Site.

4. Will Slater, HWDMS, telephone conversation with R. Hoffmann, NUS Corporation, April 5, 1990. Subject: Interim status of WEC facility.

5. NUS Corporation Field Logbook No. F4-1378 for Westinghouse Electric Corporation, TDD No. F4-8903-40. Documentation of Screening Site Inspection, May 3-4, 1989.

6. Kenneth A. Lucas, "Preliminary Reassessment, Westinghouse Electric Corporation, Athens, Clarke County, Georgia," prepared for the Environmental Protection Agency, March 8, 1989.

7. Charles K. Gorham, Quality Assurance Supervisor, Westinghouse Electric Corporation, letter to George M. Saad, Environmental Engineer, Solid Waste Management Section, Georgia Environmental Protection Division, June 29, 1981. Subject: Liquid wastes generated at Westinghouse.

8. NUS Corporation Field Logbook No. F4-1349 for Westinghouse Electric Corporation, TDD No. F4-8903-40. Documentation of onsite reconnaissance, April 17, 1989.

9. Anne Spence, Athens, Georgia Chamber of Commerce, telephone conversation with R. Hoffmann, NUS Corporation, November 6, 1989. Subject: Population of Athens, Georgia.

10. U.S. Environmental Protection Agency, Graphical Exposure Modeling Systems (GEMS) Data Base, compiled from U.S. Bureau of the Census data (1980).

11. U.S. Department of Commerce, Climatic Atlas of the United States (Washington, D.C.: GPO, June 1968) Reprint: 1983, National Oceanic and Atmospheric Administration.

12. U.S. Department of Commerce, Monthly Normals of Temperature, Precipitation, and Heating and Cooling Degree Days 1951-80 in Georgia (National Climatic Center, Ashville, N.C. 1982), pp. 2, 5.

13. Dean B. Radtke, Charles W. Cressler, Howard A. Pearlman, Harry E. Blanebard, Jr., Keith W. McFadden, and Rebekah Brooks, Occurrence and Availability of Ground Water in the Athens Region, Northeastern Georgia, Water-Resources Investigations Report 86-4075 (U.S. Army Corps of Engineers, 1986), pp. 8-11, plate 1.

14. U.S. Department of Commerce, Rainfall Frequency Atlas of the United States, Technical Paper Number 40 (Washington, D.C.: GPO, 1961).

15. Rebecca Hoffmann, NUS Corporation; memo to file for Westinghouse Electric Corporation, August 12, 1989. Subject: Conversation with Roy Burns, Water Superintendent for Athens Water Department, concerning extent of water lines.

16. J.S. Clarke, S.A. Longsworth, C.N. Joiner, M.F. Peck, K.W. McFadden, and B.J. Milby, Groundwater Data for Georgia, Open File Report 87-367 (Georgia Department of Natural Resources Environmental Protection Division and Georgia Geologic Survey), pp. 4-5.

17. U.S. Geological Survey, National Water Summary: Hydrologic Events, Selected Water Quality Trends, and Ground-Water Resources, Water Supply Paper 2275 (1984), p. 162.

18. NUS Corporation Field Logbook No. F4-1377 for Westinghouse Electric Corporation, TDD No. F4-8904-04. Documentation of geophysical survey, May 3, 1989.

APPENDIX A

APPENDIX B

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34905 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1550 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
5.0U	SILVER
15U	ARSENIC
NA	BORON
26	BARIUM
2.5U	BERYLLIUM
2.5U	CADMIUM
5.0U	COBALT
29	CHROMIUM
34	COPPER
5.0U	MOLYBDENUM
14	NICKEL
29	LEAD
15U	ANTIMONY
20U	SELENIUM
12U	TIN
5.0U	STRONTIUM
25U	TELLURIUM
940	TITANIUM
50U	THALLIUM
120	VANADIUM
9.7	YTTRIUM
26	ZINC
NA	ZIRCONIUM
0.050U	MERCURY
27000	ALUMINUM
250	MANGANESE

MG/KG	ANALYTICAL RESULTS
250U	CALCIUM
1100	MAGNESIUM
45000	IRON
500U	SODIUM
1100	POTASSIUM
22	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34906 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SD-01 BACKGROUND SEDIMENT SOIL COLLECTION START: 05/03/89 1630 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
2.0U	SILVER
6.0U	ARSENIC
NA	BORON
21	BARIUM
1.0U	BERYLLIUM
1.0U	CADMIUM
2.0U	COBALT
15	CHROMIUM
3.9	COPPER
2.0U	MOLYBDENUM
4.0U	NICKEL
6.3	LEAD
6.0U	ANTIMONY
8.0U	SELENIUM
5.0U	TIN
2.0U	STRONTIUM
10U	TELLURIUM
410	TITANIUM
20U	THALLIUM
42	VANADIUM
7.1	YTTRIUM
12	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
4400	ALUMINUM
150	MANGANESE

MG/KG	ANALYTICAL RESULTS
150	CALCIUM
710	MAGNESIUM
16000	IRON
200U	SODIUM
820	POTASSIUM
20	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-01 BACKGROUND SURFACE SOIL COLLECTION START: 05/03/89 1530 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
3.0U	SILVER
9.0U	ARSENIC
NA	BORON
160	BARIUM
1.5U	BERYLLIUM
1.5U	CADMIUM
15	COBALT
14	CHROMIUM
7.5	COPPER
3.0U	MOLYBDENUM
6.0U	NICKEL
25	LEAD
9.0U	ANTIMONY
12U	SELENIUM
7.5U	TIN
3.0U	STRONTIUM
15U	TELLURIUM
1800	TITANIUM
30U	THALLIUM
61	VANADIUM
14	YTTRIUM
53	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
30000	ALUMINUM
800	MANGANESE

MG/KG	ANALYTICAL RESULTS
150U	CALCIUM
8300	MAGNESIUM
26000	IRON
300U	SODIUM
7800	POTASSIUM
19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34899 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-02 SUBSURFACE SOIL #2

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1005 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
7.0U	SILVER
21U	ARSENIC
NA	BORON
90	BARIUM
3.5U	BERYLLIUM
3.5U	CADMIUM
7.0U	COBALT
34	CHROMIUM
22	COPPER
7.0U	MOLYBDENUM
14U	NICKEL
42	LEAD
21U	ANTIMONY
28U	SELENIUM
18U	TIN
7.0U	STRONTIUM
35U	TELLURIUM
1900	TITANIUM
70U	THALLIUM
150	VANADIUM
7.0U	YTTRIUM
31	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
55000	ALUMINUM
310	MANGANESE

MG/KG	ANALYTICAL RESULTS
580	CALCIUM
2100	MAGNESIUM
53000	IRON
700U	SODIUM
2500	POTASSIUM
21	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34907 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SD-02 SEDIMENT SOIL #02

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1815 STOP: 00/00/00

ANALYTICAL RESULTS

MG/KG	
6.0U	SILVER
18U	ARSENIC
NA	BORON
180	BARIUM
3.0U	BERYLLIUM
3.0U	CADMIUM
18	COBALT
47	CHROMIUM
30	COPPER
6.0U	MOLYBDENUM
12U	NICKEL
45	LEAD
18U	ANTIMONY
24U	SELENIUM
15U	TIN
12	STRONTIUM
30U	TELLURIUM
1000	TITANIUM
60U	THALLIUM
120	VANADIUM
25	YTTRIUM
57	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
46000	ALUMINUM
4500	MANGANESE

ANALYTICAL RESULTS

MG/KG	
1200	CALCIUM
1900	MAGNESIUM
50000	IRON
600U	SODIUM
1400	POTASSIUM
45	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-02 SURFACE SOIL #02

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1020 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
2.0U	SILVER
6.0U	ARSENIC
NA	BORON
92	BARIUM
1.0U	BERYLLIUM
1.0U	CADMIUM
5.9	COBALT
28	CHROMIUM
51	COPPER
2.0U	MOLYBDENUM
6.0	NICKEL
140	LEAD
6.0U	ANTIMONY
8.0U	SELENIUM
5.0U	TIN
8.2	STRONTIUM
10U	TELLURIUM
710	TITANIUM
20U	THALLIUM
43	VANADIUM
13	YTTRIUM
100	ZINC
NA	ZIRCONIUM
0.05U	MERCURY
19000	ALUMINUM
320	MANGANESE

MG/KG	ANALYTICAL RESULTS
2200	CALCIUM
1900	MAGNESIUM
14000	IRON
200U	SODIUM
1800	POTASSIUM
13	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SB-03 SUBSURFACE SOIL #03

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START. 05/04/89 1225 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
5.0U	SILVER
15U	ARSENIC
NA	BORON
60	BARIUM
2.5U	BERYLLIUM
2.5U	CADMIUM
15	COBALT
56	CHROMIUM
13	COPPER
5.0U	MOLYBDENUM
11	NICKEL
21	LEAD
15U	ANTIMONY
20U	SELENIUM
12U	TIN
5.0U	STRONTIUM
25U	TELLURIUM
1200	TITANIUM
50U	THALLIUM
81	VANADIUM
5.0U	YTTRIUM
40	ZINC
NA	ZIRCONIUM
0.1	MERCURY
50000	ALUMINUM
1300	MANGANESE

MG/KG	ANALYTICAL RESULTS
290	CALCIUM
1200	MAGNESIUM
34000	IRON
500U	SODIUM
1200	POTASSIUM
19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-03 SURFACE SOIL #03 COLLECTION START: 05/04/89 1035 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
50U	SILVER
150U	ARSENIC
NA	BORON
130	BARIUM
25U	BERYLLIUM
25U	CADMIUM
50U	COBALT
2400	CHROMIUM
23000	COPPER
50U	MOLYBDENUM
100U	NICKEL
10000	LEAD
150U	ANTIMONY
200U	SELENIUM
120U	TIN
50U	STRONTIUM
250U	TELLURIUM
1100	TITANIUM
500U	THALLIUM
70	VANADIUM
50U	YTTRIUM
3000	ZINC
NA	ZIRCONIUM
0.05	MERCURY
28000	ALUMINUM
500	MANGANESE

MG/KG	ANALYTICAL RESULTS
2500U	CALCIUM
3500	MAGNESIUM
29000	IRON
5000U	SODIUM
10000U	POTASSIUM
33	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 06/09/89

PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-04 SURFACE SOIL #04 COLLECTION START: 05/04/89 1120 STOP: 00/00/00

MG/KG	ANALYTICAL RESULTS
25U	SILVER
75U	ARSENIC
NA	BORON
9000	BARIUM
12U	BERYLLIUM
12U	CADMIUM
55	COBALT
8700	CHROMIUM
9900	COPPER
25U	MOLYBDENUM
58	NICKEL
9000	LEAD
100	ANTIMONY
100U	SELENIUM
62U	TIN
120	STRONTIUM
120U	TELLURIUM
170	TITANIUM
250U	THALLIUM
46	VANADIUM
25U	YTTRIUM
10000	ZINC
NA	ZIRCONIUM
0.10	MERCURY
18000	ALUMINUM
210	MANGANESE

MG/KG	ANALYTICAL RESULTS
1800	CALCIUM
1000	MAGNESIUM
29000	IRON
2500U	SODIUM
5000U	POTASSIUM
29	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

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*****************************************************************************************************
**   PROJECT NO. 89-400   SAMPLE NO. 34904  SAMPLE TYPE: SOIL      PROG ELEM: NSF   COLLECTED BY: R YOUNG        **
**   SOURCE: WESTINGHOUSE ELECT.                                   CITY: ATHENS                ST: GA           **
**   STATION ID: SS-01 BACKGROUND SURFACE SOIL                     COLLECTION START: 05/03/89  1530  STOP: 00/00/00 **
**                                                                                                              **
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RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 89-400   SAMPLE NO. 34900  SAMPLE TYPE: SOIL       PROG ELEM: NSF   COLLECTED BY: R YOUNG                  **
**   SOURCE: WESTINGHOUSE ELECT.                                    CITY: ATHENS               ST: GA                       **
**   STATION ID: SS-02 SURFACE SOIL #02                             COLLECTION START: 05/04/89  1020   STOP: 00/00/00       **
**                                                                                                                          **
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RESULTS	UNITS	PARAMETER
0.25	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-03 SURFACE SOIL #03

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1035 STOP: 00/00/00

RESULTS	UNITS	PARAMETER
0.300U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-04 SURFACE SOIL #04 COLLECTION START: 05/04/89 1120 STOP: 00/00/00

RESULTS	UNITS	PARAMETER
1.2	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 89-400    SAMPLE NO. 34905  SAMPLE TYPE: SOIL         PROG ELEM: NSF   COLLECTED BY: R YOUNG                  **
**   SOURCE: WESTINGHOUSE ELECT.                                       CITY: ATHENS               ST: GA                       **
**   STATION ID: SB-01 BACKGROUND SUBSURFACE SOIL                      COLLECTION START: 05/03/89  1550   STOP: 00/00/00       **
**                                                                                                                             **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
0.26U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 89-400    SAMPLE NO. 34899  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R YOUNG                    **
**   SOURCE: WESTINGHOUSE ELECT.                                      CITY: ATHENS                  ST: GA                      **
**   STATION ID: SB-02 SUBSURFACE SOIL #2                             COLLECTION START: 05/04/89  1005   STOP: 00/00/00         **
**                                                                                                                              **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34903 SAMPLE TYPE: SOIL	PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT.	CITY: ATHENS ST: GA
STATION ID: SB-03 SUBSURFACE SOIL #03	COLLECTION START: 05/04/89 1225 STOP: 00/00/00

RESULTS	UNITS	PARAMETER
0.33	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 89-400   SAMPLE NO. 34906  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R YOUNG                   **
**   SOURCE: WESTINGHOUSE ELECT.                                     CITY: ATHENS               ST: GA                       **
**   STATION ID: SD-01 BACKGROUND SEDIMENT SOIL                      COLLECTION START: 05/03/89  1630   STOP: 00/00/00       **
**                                                                                                                            **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/18/89

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 89-400   SAMPLE NO. 34907  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R YOUNG                      **
**   SOURCE: WESTINGHOUSE ELECT.                                     CITY: ATHENS               ST: GA                           **
**   STATION ID: SD-02 SEDIMENT SOIL #02                             COLLECTION START: 05/03/89  1815   STOP: 00/00/00           **
**                                                                                                                               **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
0.36U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 06/13/89

PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-01 BACKGROUND SURFACE SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1530 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
39U	CHLOROMETHANE
39U	VINYL CHLORIDE
39U	BROMOMETHANE
39U	CHLOROETHANE
39U	TRICHLOROFLUOROMETHANE
39U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
390U	ACETONE
390U	CARBON DISULFIDE
39U	METHYLENE CHLORIDE
39U	TRANS-1,2-DICHLOROETHENE
39U	1,1-DICHLOROETHANE
390U	VINYL ACETATE
39U	CIS-1,2-DICHLOROETHENE
39U	2,2-DICHLOROPROPANE
390U	METHYL ETHYL KETONE
39U	BROMOCHLOROMETHANE
39U	CHLOROFORM
39U	1,1,1-TRICHLOROETHANE
39U	1,1 DICHLOROPROPENE
39U	CARBON TETRACHLORIDE
39U	1,2-DICHLOROETHANE
39U	BENZENE
39U	TRICHLOROETHENE(TRICHLOROETHYLENE)
39U	1,2-DICHLOROPROPANE
39U	DIBROMOMETHANE
39U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
39U	CIS 1,3-DICHLOROPROPENE
390U	METHYL ISOBUTYL KETONE
39U	TOLUENE
39U	TRANS-1,3 DICHLOROPROPENE
39U	1,1,2-TRICHLOROETHANE
39U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
39U	1,3-DICHLOROPROPANE
390U	METHYL BUTYL KETONE
39U	DIBROMOCHLOROMETHANE
39U	CHLOROBENZENE
39U	1,1,1,2-TETRACHLOROETHANE
39U	ETHYL BENZENE
39U	(M- AND/OR P-)XYLENE
39U	O-XYLENE
39U	STYRENE
39U	BROMOFORM
39U	BROMOBENZENE
39U	1,1,2,2-TETRACHLOROETHANE
39U	1,2,3-TRICHLOROPROPANE
39U	O-CHLOROTOLUENE
39U	P-CHLOROTOLUENE
39U	1,3-DICHLOROBENZENE
39U	1,4-DICHLOROBENZENE
39U	1,2-DICHLOROBENZENE
19.0	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 05/30/89

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-02 SURFACE SOIL #02

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1020 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
41U	CHLOROMETHANE	41U	CIS-1,3-DICHLOROPROPENE
41U	VINYL CHLORIDE	410U	METHYL ISOBUTYL KETONE
41U	BROMOMETHANE	41U	TOLUENE
41U	CHLOROETHANE	41U	TRANS-1,3-DICHLOROPROPENE
41U	TRICHLOROFLUOROMETHANE	41U	1,1,2-TRICHLOROETHANE
41U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	41U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
410U	ACETONE	41U	1,3-DICHLOROPROPANE
410U	CARBON DISULFIDE	410U	METHYL BUTYL KETONE
41U	METHYLENE CHLORIDE	41U	DIBROMOCHLOROMETHANE
41U	TRANS-1,2-DICHLOROETHENE	41U	CHLOROBENZENE
41U	1,1-DICHLOROETHANE	41U	1,1,1,2-TETRACHLOROETHANE
410U	VINYL ACETATE	41U	ETHYL BENZENE
41U	CIS-1,2-DICHLOROETHENE	41U	(M- AND/OR P-)XYLENE
41U	2,2-DICHLOROPROPANE	41U	O-XYLENE
410U	METHYL ETHYL KETONE	41U	STYRENE
41U	BROMOCHLOROMETHANE	41U	BROMOFORM
41U	CHLOROFORM	41U	BROMOBENZENE
41U	1,1,1-TRICHLOROETHANE	41U	1,1,2,2-TETRACHLOROETHANE
41U	1,1-DICHLOROPROPENE	41U	1,2,3-TRICHLOROPROPANE
41U	CARBON TETRACHLORIDE	41U	O-CHLOROTOLUENE
41U	1,2-DICHLOROETHANE	41U	P-CHLOROTOLUENE
41U	BENZENE	41U	1,3-DICHLOROBENZENE
41U	TRICHLOROETHENE(TRICHLOROETHYLENE)	41U	1,4-DICHLOROBENZENE
41U	1,2-DICHLOROPROPANE	41U	1,2-DICHLOROBENZENE
41U	DIBROMOMETHANE	14.0	PERCENT MOISTURE
41U	BROMODICHLOROMETHANE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 05/30/89

PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-03 SURFACE SOIL #03

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1035 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
160U	CHLOROMETHANE	160U	CIS-1,3-DICHLOROPROPENE
160U	VINYL CHLORIDE	1600U	METHYL ISOBUTYL KETONE
160U	BROMOMETHANE	160U	TOLUENE
160U	CHLOROETHANE	160U	TRANS-1,3-DICHLOROPROPENE
160U	TRICHLOROFLUOROMETHANE	160U	1,1,2-TRICHLOROETHANE
160U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	160U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
1600U	ACETONE	160U	1,3-DICHLOROPROPANE
1600U	CARBON DISULFIDE	1600U	METHYL BUTYL KETONE
160U	METHYLENE CHLORIDE	160U	DIBROMOCHLOROMETHANE
160U	TRANS-1,2-DICHLOROETHENE	160U	CHLOROBENZENE
160U	1,1-DICHLOROETHANE	160U	1,1,1,2-TETRACHLOROETHANE
1600U	VINYL ACETATE	160U	ETHYL BENZENE
160U	CIS-1,2-DICHLOROETHENE	160U	(M- AND/OR P-)XYLENE
160U	2,2-DICHLOROPROPANE	81J	O-XYLENE
1600U	METHYL ETHYL KETONE	160U	STYRENE
160U	BROMOCHLOROMETHANE	160U	BROMOFORM
160U	CHLOROFORM	160U	BROMOBENZENE
160U	1,1,1-TRICHLOROETHANE	160U	1,1,2,2-TETRACHLOROETHANE
160U	1,1-DICHLOROPROPENE	160U	1,2,3-TRICHLOROPROPANE
160U	CARBON TETRACHLORIDE	160U	O-CHLOROTOLUENE
160U	1,2-DICHLOROETHANE	160U	P-CHLOROTOLUENE
160U	BENZENE	160U	1,3-DICHLOROBENZENE
160U	TRICHLOROETHENE(TRICHLOROETHYLENE)	160U	1,4-DICHLOROBENZENE
160U	1,2-DICHLOROPROPANE	160U	1,2-DICHLOROBENZENE
160U	DIBROMOMETHANE	33.0	PERCENT MOISTURE
160U	BROMODICHLOROMETHANE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/30/89

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-03 SURFACE SOIL #03

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1035 STOP: 00/00/00

ANALYTICAL RESULTS UG/KG

200JN	TRIMETHYLBENZENE
N	PETROLEUM PRODUCT

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 06/13/89

PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-04 SURFACE SOIL #04 COLLECTION START: 05/04/89 1120 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
930000U	CHLOROMETHANE	930000U	CIS 1,3-DICHLOROPROPENE
930000U	VINYL CHLORIDE	9.3E6U	METHYL ISOBUTYL KETONE
930000U	BROMOMETHANE	930000U	TOLUENE
930000U	CHLOROETHANE	930000U	TRANS-1,3 DICHLOROPROPENE
930000U	TRICHLOROFLUOROMETHANE	930000U	1,1,2-TRICHLOROETHANE
930000U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	930000U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
9.3E6U	ACETONE	930000U	1,3-DICHLOROPROPANE
9.3E6U	CARBON DISULFIDE	9.3E6U	METHYL BUTYL KETONE
930000U	METHYLENE CHLORIDE	930000U	DIBROMOCHLOROMETHANE
930000U	TRANS-1,2-DICHLOROETHENE	930000U	CHLOROBENZENE
930000U	1,1-DICHLOROETHANE	1.9E6U	1,1,1,2-TETRACHLOROETHANE
9.3E6U	VINYL ACETATE	1.1E6	ETHYL BENZENE
930000U	CIS-1,2-DICHLOROETHENE	1.7E7	(M- AND/OR P-)XYLENE
930000U	2,2-DICHLOROPROPANE	5.4E6	O-XYLENE
9.3E6U	METHYL ETHYL KETONE	1.9E6U	STYRENE
930000U	BROMOCHLOROMETHANE	930000U	BROMOFORM
930000U	CHLOROFORM	1.9E6U	BROMOBENZENE
930000U	1,1,1-TRICHLOROETHANE	930000U	1,1,2,2-TETRACHLOROETHANE
930000U	1,1 DICHLOROPROPENE	1.9E6U	1,2,3-TRICHLOROPROPANE
930000U	CARBON TETRACHLORIDE	1.9E6U	O-CHLOROTOLUENE
930000U	1,2-DICHLOROETHANE	1.9E6U	P CHLOROTOLUENE
930000U	BENZENE	1.9E6U	1,3-DICHLOROBENZENE
930000U	TRICHLOROETHENE(TRICHLOROETHYLENE)	1.9E6U	1,4-DICHLOROBENZENE
930000U	1,2-DICHLOROPROPANE	1.9E6U	1,2-DICHLOROBENZENE
930000U	DIBROMOMETHANE	40.0	PERCENT MOISTURE
930000U	BROMODICHLOROMETHANE		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/13/89

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34902 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SS-04 SURFACE SOIL #04 COLLECTION START: 05/04/89 1120 STOP: 00/00/00 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

5E6JN TRIMETHYLBENZENE (3 ISOMERS)

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 06/08/89

PROJECT NO. 89-400 SAMPLE NO. 34904 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-01 BACKGROUND SURFACE SOIL

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/03/89 1530 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
1700U	BIS(2-CHLOROETHYL) ETHER
1700U	BIS(2-CHLOROISOPROPYL) ETHER
1700U	N-NITROSODI-N-PROPYLAMINE
1700U	HEXACHLOROETHANE
1700U	NITROBENZENE
1700U	ISOPHORONE
1700U	BIS(2-CHLOROETHOXY) METHANE
1700U	1,2,4-TRICHLOROBENZENE
1700U	NAPHTHALENE
1700U	4-CHLOROANILINE
1700U	HEXACHLOROBUTADIENE
1700U	2-METHYLNAPHTHALENE
1700U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1700U	2-CHLORONAPHTHALENE
1700U	2-NITROANILINE
1700U	DIMETHYL PHTHALATE
1700U	ACENAPHTHYLENE
1700U	2,6-DINITROTOLUENE
1700U	3-NITROANILINE
1700U	ACENAPHTHENE
1700U	DIBENZOFURAN
1700U	2,4-DINITROTOLUENE
1700U	DIETHYL PHTHALATE
1700U	FLUORENE
1700U	4-CHLOROPHENYL PHENYL ETHER
1700U	4-NITROANILINE
1700U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1700U	4-BROMOPHENYL PHENYL ETHER
1700U	HEXACHLOROBENZENE (HCB)
1700U	PHENANTHRENE
1700U	ANTHRACENE
1700U	DI-N-BUTYLPHTHALATE

UG/KG	ANALYTICAL RESULTS
1700U	FLUORANTHENE
1700U	PYRENE
1700U	BENZYL BUTYL PHTHALATE
1700U	3,3'-DICHLOROBENZIDINE
1700U	BENZO(A)ANTHRACENE
1700U	CHRYSENE
1700U	BIS(2-ETHYLHEXYL) PHTHALATE
1700U	DI-N-OCTYLPHTHALATE
1700U	BENZO(B AND/OR K)FLUORANTHENE
1700U	BENZO-A-PYRENE
1700U	INDENO (1,2,3-CD) PYRENE
1700U	DIBENZO(A,H)ANTHRACENE
1700U	BENZO(GHI)PERYLENE
1700U	PHENOL
1700U	2-CHLOROPHENOL
3300U	BENZYL ALCOHOL
1700U	2-METHYLPHENOL
1700U	(3-AND/OR 4-)METHYLPHENOL
1700U	2-NITROPHENOL
1700U	2,4-DIMETHYLPHENOL
3300U	BENZOIC ACID
1700U	2,4-DICHLOROPHENOL
1700U	4-CHLORO-3-METHYLPHENOL
1700U	2,4,6-TRICHLOROPHENOL
1700U	2,4,5-TRICHLOROPHENOL
3300U	2,4-DINITROPHENOL
3300U	4-NITROPHENOL
1700U	2,3,4,6-TETRACHLOROPHENOL
3300U	2-METHYL-4,6-DINITROPHENOL
3300U	PENTACHLOROPHENOL
19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO  89-400    SAMPLE NO. 34901  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R YOUNG                  **
**   SOURCE: WESTINGHOUSE ELECT.                                      CITY: ATHENS                 ST: GA                     **
**   STATION ID: SS-01 BACKGROUND SURFACE SOIL                        COLLECTION START: 05/03/89  1530   STOP: 00/00/00        **
**                                                                                                                            **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
```

ANALYTICAL RESULTS UG/KG

1000JN   HEXADECANOIC ACID

FOOTNOTES

*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA
STATION ID: SS-02 SURFACE SOIL #02 COLLECTION START: 05/04/89 1020 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
16000U	BIS(2-CHLOROETHYL) ETHER	78000	FLUORANTHENE
16000U	BIS(2-CHLOROISOPROPYL) ETHER	67000	PYRENE
16000U	N-NITROSODI-N-PROPYLAMINE	16000U	BENZYL BUTYL PHTHALATE
16000U	HEXACHLOROETHANE	16000U	3,3'-DICHLOROBENZIDINE
16000U	NITROBENZENE	28000	BENZO(A)ANTHRACENE
16000U	ISOPHORONE	25000	CHRYSENE
16000U	BIS(2-CHLOROETHOXY) METHANE	16000U	BIS(2-ETHYLHEXYL) PHTHALATE
16000U	1,2,4-TRICHLOROBENZENE	16000U	DI-N-OCTYLPHTHALATE
16000U	NAPHTHALENE	51000	BENZO(B AND/OR K)FLUORANTHENE
16000U	4-CHLOROANILINE	24000	BENZO-A-PYRENE
16000U	HEXACHLOROBUTADIENE	10000J	INDENO (1,2,3-CD) PYRENE
16000U	2-METHYLNAPHTHALENE	3700J	DIBENZO(A,H)ANTHRACENE
16000U	HEXACHLOROCYCLOPENTADIENE (HCCP)	9500J	BENZO(GHI)PERYLENE
16000U	2-CHLORONAPHTHALENE	16000U	PHENOL
16000U	2-NITROANILINE	16000U	2-CHLOROPHENOL
16000U	DIMETHYL PHTHALATE	31000U	BENZYL ALCOHOL
2800J	ACENAPHTHYLENE	16000U	2-METHYLPHENOL
16000U	2,6-DINITROTOLUENE	16000U	(3-AND/OR 4-)METHYLPHENOL
16000U	3-NITROANILINE	16000U	2-NITROPHENOL
16000U	ACENAPHTHENE	16000U	2,4-DIMETHYLPHENOL
16000U	DIBENZOFURAN	31000U	BENZOIC ACID
16000U	2,4-DINITROTOLUENE	16000U	2,4-DICHLOROPHENOL
16000U	DIETHYL PHTHALATE	16000U	4-CHLORO-3-METHYLPHENOL
16000U	FLUORENE	16000U	2,4,6-TRICHLOROPHENOL
16000U	4-CHLOROPHENYL PHENYL ETHER	16000U	2,4,5-TRICHLOROPHENOL
16000U	4-NITROANILINE	31000U	2,4-DINITROPHENOL
16000U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE	31000U	4-NITROPHENOL
16000U	4-BROMOPHENYL PHENYL ETHER	16000U	2,3,4,6-TETRACHLOROPHENOL
16000U	HEXACHLOROBENZENE (HCB)	31000U	2-METHYL-4,6-DINITROPHENOL
16000	PHENANTHRENE	31000U	PENTACHLOROPHENOL
5200J	ANTHRACENE	14	PERCENT MOISTURE
16000U	DI-N-BUTYLPHTHALATE		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 89-400 SAMPLE NO. 34900 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG
SOURCE: WESTINGHOUSE ELECT CITY: ATHENS ST: GA
STATION ID: SS-02 SURFACE SOIL #02 COLLECTION START: 05/04/89 1020 STOP: 00/00/00

ANALYTICAL RESULTS UG/KG

2000JN	(DIMETHYLBUTENYLIDENE)BISBENZENE
2000JN	METHYLPHENANTHRENE
6000JN	CYCLOPENTAPHENANTHRENE
3000JN	PHENYLNAPHTHALENE
2000JN	BIS(BUTADIYNEDIYL)BENZENE
9000JN	BENZONAPHTHOFURAN (3 ISOMERS)
3000JN	PHENANTHRENECARBONITRILE
20000JN	METHYLFLUORANTHENE (4 ISOMERS)
8000JN	BENZOFLUORENE
7000JN	BENZONAPHTHOTHIOPHENE
40000JN	BENZOFLUORANTHENE (NOT B OR K) (2 ISOMERS)
200000J	2 UNIDENTIFIED COMPOUNDS
2000JN	BENZOPHENANTHRENONE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 06/08/89

PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL
SOURCE: WESTINGHOUSE ELECT.
STATION ID: SS-03 SURFACE SOIL #03

PROG ELEM: NSF COLLECTED BY: R YOUNG
CITY: ATHENS ST: GA
COLLECTION START: 05/04/89 1035 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
20000U	BIS(2-CHLOROETHYL) ETHER
20000U	BIS(2-CHLOROISOPROPYL) ETHER
20000U	N-NITROSODI-N-PROPYLAMINE
20000U	HEXACHLOROETHANE
20000U	NITROBENZENE
20000U	ISOPHORONE
20000U	BIS(2-CHLOROETHOXY) METHANE
20000U	1,2,4-TRICHLOROBENZENE
20000U	NAPHTHALENE
20000U	4-CHLOROANILINE
20000U	HEXACHLOROBUTADIENE
20000U	2-METHYLNAPHTHALENE
20000U	HEXACHLOROCYCLOPENTADIENE (HCCP)
20000U	2-CHLORONAPHTHALENE
20000U	2-NITROANILINE
20000U	DIMETHYL PHTHALATE
20000U	ACENAPHTHYLENE
20000U	2,6-DINITROTOLUENE
20000U	3-NITROANILINE
20000U	ACENAPHTHENE
20000U	DIBENZOFURAN
20000U	2,4-DINITROTOLUENE
20000U	DIETHYL PHTHALATE
20000U	FLUORENE
20000U	4-CHLOROPHENYL PHENYL ETHER
20000U	4-NITROANILINE
20000U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20000U	4-BROMOPHENYL PHENYL ETHER
20000U	HEXACHLOROBENZENE (HCB)
20000U	PHENANTHRENE
20000U	ANTHRACENE
20000U	DI-N-BUTYLPHTHALATE

UG/KG	ANALYTICAL RESULTS
20000U	FLUORANTHENE
20000U	PYRENE
20000U	BENZYL BUTYL PHTHALATE
20000U	3,3'-DICHLOROBENZIDINE
20000U	BENZO(A)ANTHRACENE
20000U	CHRYSENE
20000U	BIS(2-ETHYLHEXYL) PHTHALATE
20000U	DI-N-OCTYLPHTHALATE
20000U	BENZO(B AND/OR K)FLUORANTHENE
20000U	BENZO-A-PYRENE
20000U	INDENO (1,2,3-CD) PYRENE
20000U	DIBENZO(A,H)ANTHRACENE
20000U	BENZO(GHI)PERYLENE
20000U	PHENOL
20000U	2-CHLOROPHENOL
40000U	BENZYL ALCOHOL
20000U	2-METHYLPHENOL
20000U	(3-AND/OR 4-)METHYLPHENOL
20000U	2-NITROPHENOL
20000U	2,4-DIMETHYLPHENOL
40000U	BENZOIC ACID
20000U	2,4-DICHLOROPHENOL
20000U	4-CHLORO-3-METHYLPHENOL
20000U	2,4,6-TRICHLOROPHENOL
20000U	2,4,5-TRICHLOROPHENOL
40000U	2,4-DINITROPHENOL
40000U	4-NITROPHENOL
20000U	2,3,4,6-TETRACHLOROPHENOL
40000U	2-METHYL-4,6-DINITROPHENOL
40000U	PENTACHLOROPHENOL
33	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

06/08/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 89-400 SAMPLE NO. 34901 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R YOUNG **
** SOURCE: WESTINGHOUSE ELECT. CITY: ATHENS ST: GA **
** STATION ID: SS-03 SURFACE SOIL #03 COLLECTION START: 05/04/89 1035 STOP: 00/00/00 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

5000JN	METHYLPROPYLBENZENE
9000JN	DIETHYLMETHYLBENZENE (2 ISOMERS)
6000JN	(DIMETHYLPROPYL)BENZENE
10000JN	DIMETHYL(METHYLETHYL)BENZENE (2 ISOMERS)
4000JN	ETHYLTRIMETHYLBENZENE
6000JN	HEXANOIC ACID
3000JN	COPAENE
40000JN	HEPTADECANOL (2 ISOMERS)
200000JN	TETRADECANOIC ACID
40000JN	PENTADECANOIC ACID
40000JN	TETRADECANAL
2E6JN	HEXADECANOIC ACID
2E6J	11 UNIDENTIFIED COMPOUNDS
100000JN	HEPTADECANOIC ACID
700000JN	OCTADECANOIC ACID
N	PETROLEUM PRODUCT
40000JN	ETHYLDIMETHYLBENZENE (5 ISOMERS)

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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NUS
CORPORATION

1927 LAKESIDE PARKWAY
SUITE 614
TUCKER, GEORGIA 30084
404-938-7710

received
JUL 11 1989
SSB/SAS

C-586-7-9-80

July 11, 1989

Mr. A. R. Hanke
Site Investigation and Support Branch
Waste Management Division
Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30365

FILE

COMPLETE

ENG

Mailed to Westinghouse as requested
Mary L. 7/19/89

Subject: Westinghouse Electric Corporation
Athens, Clarke County, Georgia
TDD No. F4-8903-40

Dear Mr. Hanke:

Enclosed please find one (1) copy of the analytical results for inorganic and organic analyses of samples collected at the Westinghouse Electric Corporation site. Westinghouse representatives have requested these results and they should be forwarded to the following address:

Westinghouse Electric Corporation
c/o Mr. Frank Jones
Newton Bridge Road
Athens, Georgia 30613

Please contact me if you have any questions or comments.

Very truly yours,

Rebecca Hoffmann

Rebecca Hoffmann
Project Manager

Approved:

RH/dwf

Enclosure (1)

cc: Mario Villamarzo

ACCESS INFORMATION SHEET

Site Name:	Westinghouse Electric Corp.	**FIT Project Manager:**	Rebecca Hoffmann
Site Address:	Newton Bridge Road	**FIT State Coordinator:**	Geoff Carton
	Athens, GA 30613	**EPA Contact:**	Ken Lucas
		Field Date:	May 1, 1989
EPA ID #:	GAD003295144	**TDD Number:**	F4-8903-40

	File Information	Verification
Facility Owner/Operator Address Phone No. Principal Contact	Westinghouse Electric Corp. Newton Bridge Road Athens, GA 30613 (404) 548-3121 Frank ~~Jones~~ JAMES (Environmental Control Officer) Converted w/ HARRY BRYAN HIS SUPERVISOR	
Landowner Address Phone No. Principal Contact (if different from above)	Westinghouse Electric Corp. 11 Stanwix Street Pittsburgh, PA 15222 Samuel Pitts (Vice President Environmental Affairs) (412) 255-1770	
Date of Information	December 1988	

Date Access Required (3 weeks prior to field date)	______	**Date Information Submitted to EPA**	3/30/89

Comments:

April 17th or 18th of April
for onsite Recon

FILE

U. S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV, ATHENS, GEORGIA

8188/SAS
RECEIVED
MAY 01 1989
EPA - REGION IV
ATLANTA, GA

MEMORANDUM

DATE: APR 26 1989

SUBJECT: Westinghouse Electric Corporation
Site Screening Investigation Study Plan
Athens, Clarke County, Georgia. ESD Project No. 89E-221.

FROM: Patrick Boyle, Environmental Scientist Patrick Boyle
Hazardous Waste Section
Environmental Compliance Branch
Environmental Services Division

TO: Al Hanke, Chief
Site Assessment Section
Site Investigation and Support Branch
Waste Management Division

THRU: M. D. Lair, Chief
Hazardous Waste Section
Environmental Compliance Branch
Environmental Services Division

The subject document has been reviewed and it appears to be an adequate study plan for the intended purpose of the investigation. However, there was no mention of the fact that the city of Athens water supply is drawn from surface water sources. A brief discussion of the locations of the city of Athens water intakes relative to the migration pathways from this site is warranted.

Also, often times an onsite visual reconnaissance can fairly accurately reveal landfill boundaries, reducing the need for a geophysical screening in a study of this type.

If you have any questions concerning these comments, please call at FTS 250-3351.

cc: Finger/Patton
Lair
Knight
Blackwell, NUS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

ENVIRONMENTAL SERVICES DIVISION
ATHENS, GEORGIA 30613

SISB/SAS
RECEIVED
APR 25 1989
EPA - REGION IV
ATLANTA, GA.

MEMORANDUM

DATE: April 20, 1989

SUBJECT: Westinghouse Electric Corporation, Athens, GA, SSI Study Plan

FROM: Pat Stamp Pat Stamp
Laboratory Quality Control Specialist
Laboratory Evaluation & Quality Assurance Section

TO: Al Hanke, Chief
Site Assessment Section
Site Investigation & Support Branch, WASTMD

THRU: Wade Knight, Chief Wade Knight
Laboratory Evaluation & Quality Assurance Section

We have reviewed the subject document and have no comments.

FILE

R-586-4-9-13

STUDY PLAN
SCREENING SITE INSPECTION
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA
EPA ID #: GAD003295144

Prepared Under
TDD No. F4-8903-40
CONTRACT NO. 68-01-7346

Revision 0

FOR THE

WASTE MANAGEMENT DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

April 14, 1989

NUS CORPORATION
SUPERFUND DIVISION

Prepared By	Reviewed By	Approved By
Rebecca A. Hoffmann	Roger Franklin for	Greg Schank for
Rebecca A. Hoffmann Project Manager	Phil Blackwell Assistant Regional Project Manager	Murray Warner, P.E. Regional Project Manager

NOTICE

The information in this document has been funded wholly by the United States Environmental Protection Agency (EPA) under Contract Number 68-01-7346 and is considered proprietary to the EPA.

This information is not to be released to third parties without the expressed or written consent of the EPA.

TABLE OF CONTENTS

FIGURES

TABLES

STUDY PLAN

SCREENING SITE INSPECTION

WESTINGHOUSE ELECTRIC CORPORATION

ATHENS, CLARKE COUNTY, GEORGIA

EPA ID #GAD003295144

TDD NO. F4-8903-40

1.0 INTRODUCTION

The NUS Corporation Region 4 Field Investigation Team (FIT) has been tasked by the U.S. Environmental Protection Agency (EPA), Waste Management Division to conduct a Screening Site Inspection (SSI) at the Westinghouse Electric Corporation facility in Athens, Clarke County, Georgia. The investigation will be performed under the authority of the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA). The task will be performed to satisfy the requirements stated in Technical Directive Document (TDD) number F4-8903-40.

1.1 Objectives

The objectives of this sampling investigation are to collect information to assist in developing a site-specific preliminary HRS score and to determine if further investigation is required at this site.

Specific elements are:

- Obtain information to prepare a site specific preliminary HRS
- Provide EPA the necessary information to make decisions on any other actions warranted at the site.

1.2 Scope of Work

The scope of this investigation will include the following activities:

- Obtain and review background materials relevant to HRS scoring of site
- Obtain aerial photographs and maps of site, if possible
- Obtain information on local water systems
- Evaluate target population within a 4-mile radius of the site with regard to groundwater use, surface water use, and possibility of direct contact or fire and explosion hazard
- Conduct a survey of private wells
- Determine location and distance to nearest potable well
- Develop a site sketch
- Conduct a geophysical screening of site to determine areas of potential waste burial, if applicable
- Collect environmental samples

1.3 Schedule

Week of May 1, 1989

1.4 Personnel

Project Manager - Rebecca Hoffmann
Other personnel: Donnie McCurry
Phillip Henderson
Ron Wilde

1.5 Permits and Authorization Requirements

EPA is responsible for obtaining access to the site and permission to take photographs of site. In addition, EPA is responsible for all permits which may be required to accomplish this task.

1.6 Site History and Description

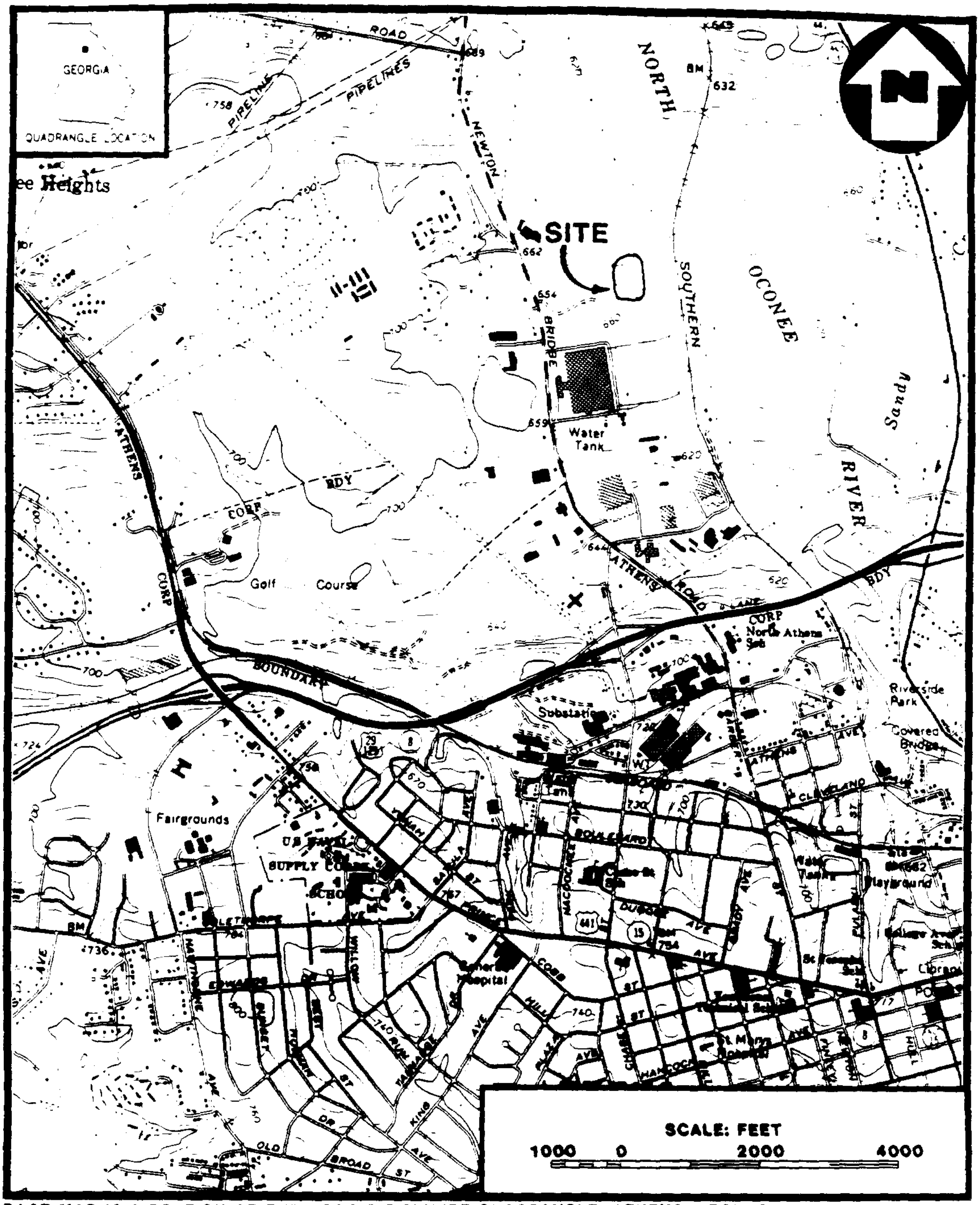
The Westinghouse Electric Corporation is located approximately 1 mile north of Athens, Clarke County, Georgia (Refs. 1, 2) (Figure 1). The Westinghouse landfill is located 800 feet north of the northeast corner of the facility, and is approximately one acre (Ref. 1) (Figure 2).

Westinghouse Electric manufactures and repairs overhead distribution transformers. Between the years of 1958 and 1970, wastes including paint and enamel filter media, waste oil, paint, paint solvents, acid cleaners and sludge from cleaning out tanks were disposed of in the landfill. It is believed that the wastes were containerized in fiber containers, 5-gallon and 55-gallons metal drums prior to disposal (Ref. 10). Sometime after 1970 the landfill was backfilled, and the site is now heavily vegetated (Ref. 3).

1.7 Regional Hydrogeology

The site is located in the Piedmont physiographic province. The rocks underlying this province are massive igneous and metamorphic rocks of relatively low permeability (Ref. 4, pp. 4, 5). The Athens area has a relatively mild climate. Temperatures average 42°F in January, and 79°F in July (Ref. 5, p. 2). Average annual rainfall is 48 inches (Ref. 6, p. 43). There are two periods of peak rainfall, one in the late winter and one in mid-summer (Ref. 5, p. 5). Net annual precipitation is 7 inches (Ref. 6, pp. 43, 63).

The aquifer used in the study area can be characterized as a crystalline rock aquifer. In this aquifer, groundwater is stored in the unconsolidated material overlying the crystalline rock and within fractures that have formed in the crystalline rock (Ref. 4, p. 12). The residual soils (Regolith) overlying bedrock are capable of storing large quantities of groundwater and well yields are generally highest in areas that have a thick regolith that is saturated with water (Ref. 7, pp. 8-11).

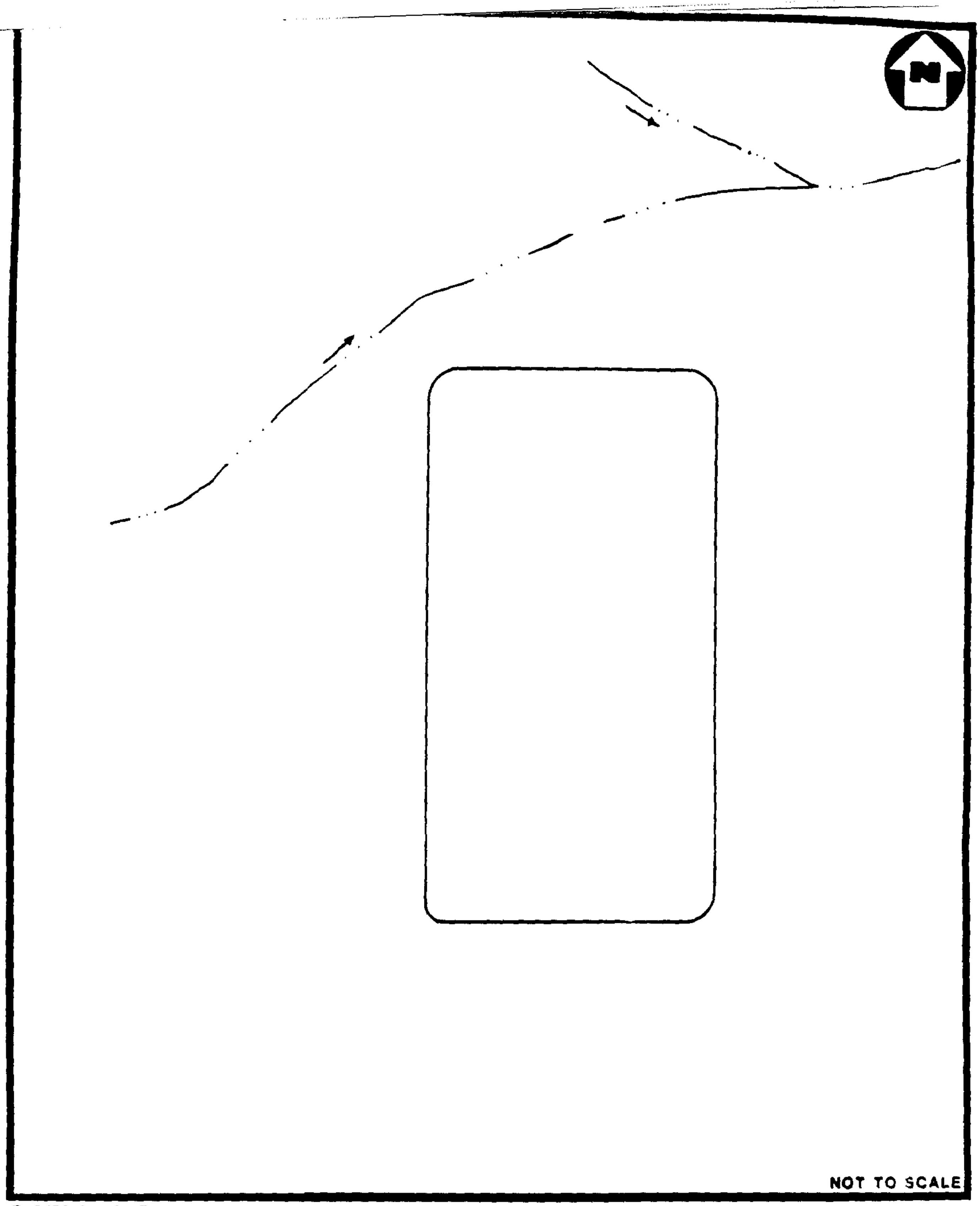


BASE MAP IS A PORTION OF THE USGS 7.5 MINUTE QUADRANGLE, ATHENS WEST, GA. 1984.

SITE LOCATION MAP
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, GEORGIA

FIGURE-1

NUS CORPORATION



SITE LAYOUT MAP
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, GEORGIA

FIGURE-2

NUS CORPORATION

The site is underlain by amphibolite interlayered with biotite schist and biotite gneiss. Wells intercepting contact zones between these rock units often have increased permeability as do wells that intersect fault zones. Well yields range from 20 to 225 gallons per minute, with an average yield of 52 gallons per minute. The average depth of wells in the Athens area is 246 feet with a typical casing depth of 69 feet (Ref. 7, plate 1). Few wells are completed to depths greater than 400 feet due to a decrease in the size and number of fractures within the rock below this depth (Ref. 7, p. 9).

Groundwater recharge occurs in topographic highs and groundwater discharge occurs in topographically low areas. The depth to the water table is also dependent on local topography. The water table may be at or near land surface in stream valleys. However, on steep hills or narrow ridges the depth to the water table may be much greater (Ref. 7, p. 11).

Groundwater flow in the regolith is unconfined and follows local topographic gradients (Ref. 7, p. 11). Groundwater flow within fractures of the underlying crystalline rock is influenced by fracture orientation. Wells penetrating deeper fracture systems may intercept groundwater that is under confined conditions.

2.0 GEOPHYSICAL SCREENING

A geophysical screening will be conducted at the site for the purposes of delineating the landfilled portion of the site. Since the exact location of waste disposal is unknown it is felt that geophysical techniques provide the most viable alternative for locating subsurface waste materials associated with these areas. The most suitable geophysical techniques applicable in this geologic setting are believed to be electromagnetics and/or magnetics. If proper subsurface conditions exist at the site these techniques will provide the necessary data needed to accurately define any subsurface waste materials. The results will then be used in determining optimum sampling locations.

Instruments to be used will include a non-contacting ground conductivity meter (Geonics-EM-31) and a proton precession magnetometer (Geometrics - G-856). A summary of geophysical methods is provided in Appendix A.

3.0 SAMPLING INVESTIGATION

The sampling investigation will include the collection of surface soil, subsurface soil, surface water, sediment and groundwater samples. Samples will be analyzed for the complete Target Compound List (TCL) and analyses will be performed under the Contract Laboratory program (CLP).

3.1 Surface Soil Sampling

Four surface soil samples will be collected, including a background sample taken southwest of the landfill. Sample codes and descriptions are present in Table 1. The locations of the proposed samples are shown in Figure 3.

3.2 Subsurface Soil Sampling

Four subsurface samples will be collected including a background as described in Table 1. Three subsurface soil samples will be collected from the suspected disposal area.

3.3 Surface Water and Sediment Sampling

Two surface water and two sediment samples will be collected from an unnamed creek along the drainage pathway. Two surface water and two sediment samples will be collected to establish background conditions. Sample codes and descriptions are provided in Table 1. Sample locations are shown in Figure 3.

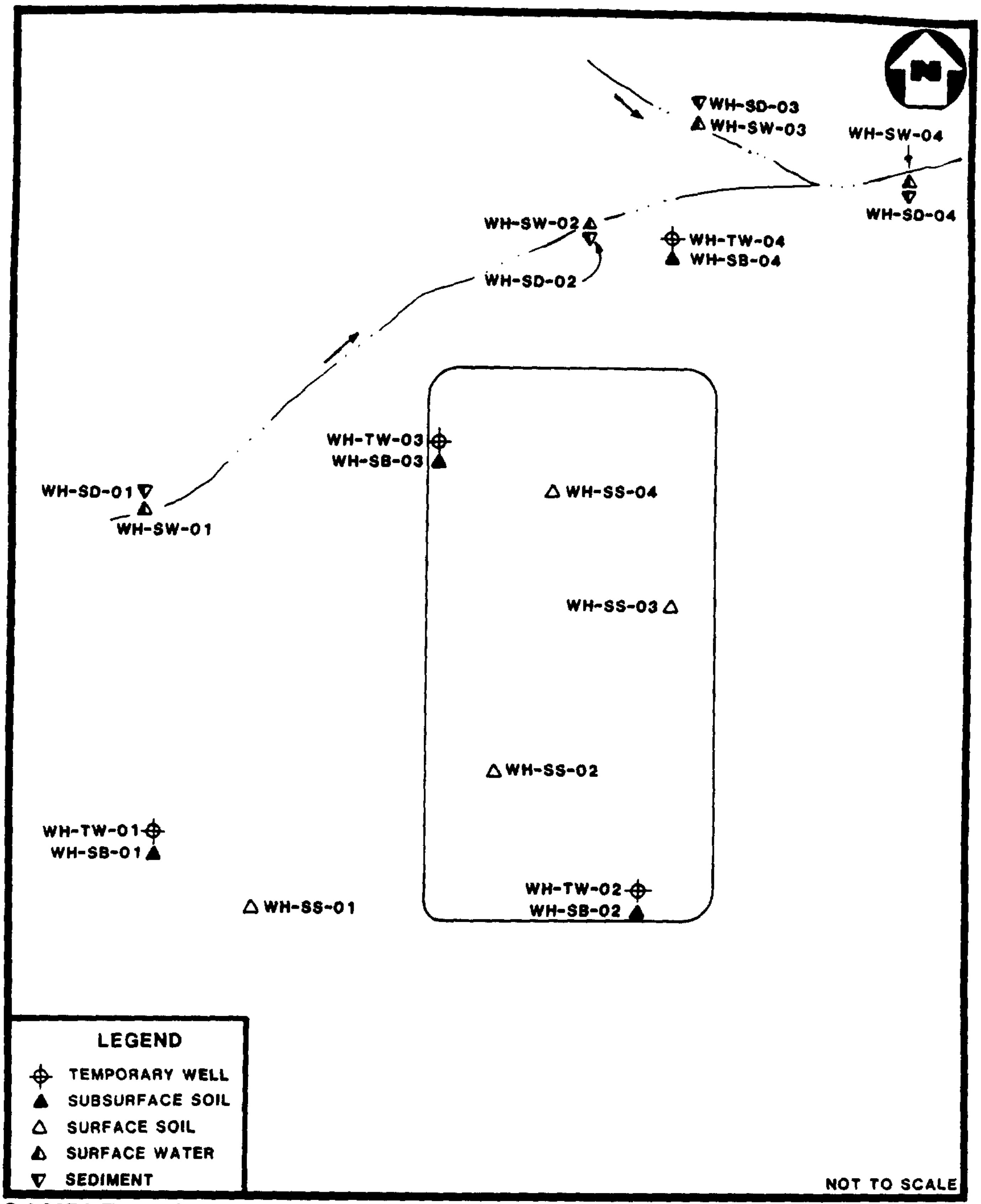
3.4 Groundwater Sampling

Four groundwater samples will be collected from the iocations shown in Figure 3. A background sample will be collected from a temporary well located upgradient of the site. Three groundwater samples will be collected from temporary wells located in the suspected disposal areas.

TABLE 1

SAMPLE CODES, DESCRIPTIONS, AND LOCATIONS
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, CLARKE COUNTY, GEORGIA

Sample Code	Description	Location/Rationale
WH-TW-01	Groundwater	Offsite - characterize background conditions
WH-TW-02	Groundwater	Onsite-determine presence or absence of contamination
WH-TW-03	Groundwater	Onsite-determine presence or absence of contamination
WH-TW-04	Groundwater	Onsite-determine presence or absence of contamination
WH-SS-01	Surface Soil	Offsite - characterize background conditions
WH-SS-02	Surface Soil	Onsite-determine presence or absence of contamination
WH-SS-03	Surface Soil	Onsite-determine presence or absence of contamination
WH-SS-04	Surface Soil	Onsite-determine presence or absence of contamination
WH-SB-01	Subsurface Soil	Offsite - characterize background conditions
WH-SB-02	Subsurface Soil	Onsite-determine presence or absence of contamination
WH-SB-03	Subsurface Soil	Onsite-determine presence or absence of contamination
WH-SB-04	Subsurface Soil	Onsite-determine presence or absence of contamination
WH-SD-01	Sediment	Offsite - characterize background conditions
WH-SD-02	Sediment	Drainage pathway-determine presence or absence of contamination
WH-SD-03	Sediment	Drainage pathway-determine presence or absence of contamination
WH-SD-04	Sediment	Drainage pathway-determine presence or absence of contamination
WH-SW-01	Surface Water	Offsite - characterize background conditions
WH-SW-02	Surface Water	Drainage pathway-determine presence or absence of contamination
WH-SW-03	Surface Water	Drainage pathway-determine presence or absence of contamination
WH-SW-04	Surface Water	Drainage pathway-determine presence or absence of contamination



SAMPLE LOCATION MAP
WESTINGHOUSE ELECTRIC CORPORATION
ATHENS, GEORGIA

FIGURE-3

NUS CORPORATION

3.5 Analytical and Container Requirements

Sample containers used will be in accordance with the requirements specified in the Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division, April 1, 1986. The following is a description of the analysis and types of containers required.

Analyses	Container	Preservatives**
Ext. Organics, Water	1 gal., amber glass*	None
Volatile Organics, Water	40 ml., glass vial*	4 drops conc. HCL to pH <2
Metals, Water	1 liter, plastic	50% HNO_3 to pH <2
Cyanide, Water	1 liter, plastic	NaOH to pH >12
Ext. Organics, Soil/Sediment	8 oz., glass*	None
Volatile Organics Soil/Sediment	4 oz., glass*	None
Inorganics, Soil/Sediment	8 oz., glass*	None

* Sample container lids are lined with teflon.

** All samples will be iced to 4°C upon collection.

3.6 Methodology

All sample collection, sample preservation, and chain-of-custody procedures used during this investigation will be in accordance with the standard operating procedures as specified in Section 3 and 4 of the Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division, April 1, 1986.

All laboratory analyses and laboratory quality assurance procedures used during this investigation will be in accordance with standard procedures and protocols as specified in the Analytical Support Branch Operations and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division; revised June 1, 1985 or as specified by the existing United States Environmental Protection Agency standard procedures and protocols for the contract analytical laboratory program.

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Appendix A

Geophysical Methodology

APPENDIX A

SUMMARY OF GEOPHYSICAL METHODS

The following sections are from "Geophysical Techniques for Sensing Buried Wastes and Waste Migration" by Glaccum, R. A., and M. R. Noel, August, 1983, Technos, Inc., for Environmental Monitoring Systems Laboratory, ORD., USEPA, Las Vegas, Nevada.

RESISTIVITY

The resistivity method is used to measure the electrical resistivity of the geohydrologic section which includes the soil, rock, and ground water. Accordingly, the method may be used to assess lateral changes and vertical cross sections of the natural geohydrologic settings. In addition, it can be used to evaluate contaminant plumes and locate buried wastes at hazardous waste sites.

Application of the method requires that an electrical current be injected into the ground by a pair of surface electrodes. The resulting potential field (voltage) is measured at the surface between a second pair of electrodes. The subsurface resistivity can be calculated by knowing the electrode separation and geometry of the electrode positions, applied current, and measured voltage. (Resistivity is the reciprocal of conductivity, the parameter directly measured by the Electromagnetic (EM) technique).

In general, most soil and rock minerals are electrical insulators (highly resistive); hence the flow of current is conducted primarily through the moisture-filled pore spaces within the soil and rock. therefore, the resistivity of soils and rocks is predominantly controlled by the porosity and permeability of the system, the amount of pore water, and the concentration of dissolved solids in the pore water.

The resistivity technique may be used for "profiling" or "sounding". Profiling provides a means of mapping lateral changes in subsurface electrical properties. This field technique is well suited to the delineation of contaminant plumes and the detection and location of changes in natural geohydrologic conditions. Sounding provides a means of determining the vertical changes in subsurface electrical properties. Interpretation of sounding data provides the depth and thickness of subsurface layers having different resistivities. Commonly up to four layers may be resolved with this technique.

Applications of the resistivity method at hazardous waste sites include:

- Locating and mapping contaminant plumes;
- Establishing direction and rate of flow of contaminant plumes;
- Defining burial sites by
  - locating trenches,
  - defining trench boundaries,
  - determining the depths of trenches.
- Defining natural geohydrologic conditions such as
  - depth to water table or to water-bearing horizons,
  - depth to bedrock, thickness of soil, etc.

Most dry mineral components of soil and rock are highly resistive except for a few metallic ore minerals. Under most circumstances, the amount of soil/rock moisture dominates the measurement. Increased moisture decreases the resistivity value. Current flow is essentially electrolytic, being conducted by water contained within pores and cracks. A few minerals like clays actually contribute to conduction. In general, soils and rocks become less resistive as:

- Mositure or water content increases;
- Porosity and permeability of the formation increases;
- Dissolved solid and colloid (electrolyte) content increases;
- Temperature increases (a minor factor, except in areas of permafrost).

Very dry sand, gravel or rock as encountered in arid or semi-arid areas will have very high resistivity. As the empty pore spaces fill with water, resistivity will drop. Conversely, the resistivity of earth materials which occur below the water table but lack pore space (such as massive granite and limestone) will be relatively high and will be primarily controlled by current conduction along cracks and fissures in the formation. Clayey soils and shale layers generally have low resistivity values, due to their inherent moisture and clay mineral content. In all cases, an increase in the electrolyte, total dissolved solids (TDS) or specific conductance of the system will cause a marked increase in current conduction and a corresponding drop in resistivity. This fact makes resistivity an excellent technique for the detection and mapping of conductive contaminant plumes.

The operator must insure that adequate space is available at the site and that it is relatively clear of buried pipes and fences. Finding sufficient space for a long profile array with an overall length three to six times the depth of interest, or a sounding array with an overall length nine to twelve times the depth of interest can sometimes be a problem.

Although resistivity sounding methods are primarily intended for use in uniformly layered geological conditions, useful data may be obtained from the complex subsurface conditions often found at HWS. With both profiling and sounding techniques, inhomogeneities in the near-surface soils may introduce noise in the data. Some surface conditions such as dry surface materials, concrete roads or parking lots may preclude the use of the resistivity method.

The resistivity method is inherently limited to station measurements, since electrodes must in physical and electrical contact with the ground. This requirement makes the resistivity method slower than a non-contact method such as EM.

Capabilities

- Resistivity profiling techniques can be used to detect and map contaminant plumes and changes in geohydrology.
- Resistivity sounding methods can estimate the depth, thickness and resistivity of subsurface layers, or depth to the water table.
- Both profiling and sounding data can be evaluated qualitatively or semi-quantitatively in the field.
- Resistivity values can be used to identify the probable geologic composition of a layer or to estimate the specific conductance of a plume.
- Depth to bottom of landfills and large burial sites can sometimes be estimated.

Limitations

- The sounding technique requires that site conditions be relatively homogeneous laterally.
- The method is susceptable to noise cause by nearby fences, pipes and geologic scatter, which may interface with usefulness of the data.
- Quantitative interpretation requires the use of master curves and/or computer programs, and experience in their use.

ELECTROMAGNETICS (EM)*

The electromagnetic (EM) method provides a means of measuring the electrical conductivity of subsurface soil, rock, and ground water. Electrical conductivity is a function of the type of soil and rock, its porosity, its permeability, and the fluids which fill the pore space. In most cases the conductivity (specific conductance) of the pore fluids will dominate the measurement. Accordingly, the EM method is applicable both to assessment of natural geohydrologic conditions and to mapping of many types of contaminant plumes. Additionally, trench boundaries, buried wastes and drums, as well as metallic utility lines can be located with EM techniques.

Natural variations in subsurface conductivity may be caused by changes in soil moisture content, ground water specific conductance, depth of soil cover over rock, and thickness of soil and rock layers. Changes in basic soil or rock types, and structural features such as fractures or voids may also produce changes in conductivity. Localized deposits of natural organic, clay, sand, gravel, or saltrich zones will also affect subsurface conductivity.

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*The term electromagnetic has been used in contemporary literature as a descriptive term for other geophysical methods, including GPR and metal detectors which are based on electromagnetic principles. However, this document will use electromagnetic (EM) to specifically imply the measurement of subsurface conductivities by low-frequency electromagnetic induction. This is in keeping with the traditional use of the term in the geophysical industry from which the EM methods originated. While the authors recognize that there are many electromagnetic systems and manufacturers, the discussion in this section is based solely on instruments which are calibrated to read in electrical conductivity units and which have been effectively and extensively used at hazardous waste sites. There is only one manufacturer of such instruments at the time of this writing.

Many contaminants will produce an increase in free ion concentration when introduced into the soil or ground water systems. This increase over background conductivity enables detection and mapping of contaminated soil and ground water at Hazardous Waste Sites (HWS), landfills, and impoundments. Large amounts of organic fluids such as diesel fuel can displace the normal soil moisture, causing a decrease in conductivity which may also be mapped, although this is not commonly done. The mapping of a plume will usually define the local flow direction of contaminants. Contaminant migration rates can be established by comparing measurements taken at different times.

The absolute values of conductivity for geologic materials (and contaminants) are not necessarily diagnostic in themselves, but the variations in conductivity, laterally and with depth, are significant. It is these variations which enable the investigator to rapidly find anomalous conditions.

Since the EM method does not require ground contact, measurements may be made quite rapidly. Lateral variations in conductivity can be detected and mapped by a field technique called profiling. Profiling measurements may be made to depths ranging from 0.75 to 60 meters. The data is recorded using strip chart and magnetic tape recorders. This continuous measurement allows increased rates of data acquisition and improved resolution for mapping small geohydrologic features. Further, recorded data enhanced by computer processing has proved invaluable in the evaluation of complex hazardous waste sites. The excellent lateral resolution obtained from EM profiling datas has been used to advantage in efforts to outline closely-spaced burial pits, to reveal the migration of contaminants into the surrounding soil, and to delineate fracture patterns.

Vertical variations in conductivity can also be detected by the EM method. A station measurement technique called sounding is employed for this purpose. Data can be acquired from depths by combining results from a variety of EM instruments, each requiring different field application techniques. Other EM systems are capable of sounding to depth of one-thousand feet or more, but have not yet been used at HWS and are not adaptable to continuous measurements.

Profiling is the most cost-effective use of the EM method. Continuous profiling can be used in many applications to increase resolution, data density, and permit total site coverage at critical sites.

At HWS, applications of EM can provide:

- Assessment of natural geohydrologic conditions;
- Locating and mapping of burial trenches and pits containing drums and/or bulk wastes;
- Determination of flow direction in both unsaturated and saturated zones;
- Rate of plume movement by comparing measurement taken at different times;
- Locating and mapping of utility pipes and cables which may affect other geophysical measurements, or whose trench may provide a permeable pathway for contaminant flow.

Although there is available a wide variety of EM equipment, most of it is intended for geophysical exploration of mineral deposits. These units have not been used at HWS and do not provide a simple conductivity reading. This document discusses only those instruments which are designed and calibrated to read directly in units of conductivity.

Conductance is measured with electronic instrumentation consisting of a transmitter coil and receiver coil. The transmitter coil radiates an electromagnetic field which induces eddy currents in the earth below the instrument. Each of these eddy current loops, in turn, generates a secondary electromagnetic field which is proportional to the magnitude of the current flowing within that loop. A part of the secondary magnetic field from each loop is intercepted by the receiver coil and produces an output voltage which (within limits) is linearly related to subsurface conductivity. This reading is a bulk measurement of conductivity, e.g., the cumulative response to subsurface conditions ranging all the way from the surface to the effective depth of the instrument.

The sampling depth of EM equipment is related to the instrument's coil spacing. Instruments with coil spacings of one, four, ten, twenty, and forty meters are commercially available. The nominal sampling depth of an EM system is taken to be approximately 1.5 times the coil spacing.

The EM sounding method can rarely identify more than two or three layers with reasonable confidence. The greater the contrast in the conductivity values of each layer, the better the results. Often, the more detailed resistivity sounding method is used to complement EM profiling data.

The results of sounding analysis are usually presented as a vertical section, in which the conductivity layers are identified as a function of depth. The analyst may be able to correlate these layers to geohydrologic units believed to exist at the site.

Although the EM technique can be used for profiling or sounding, profiling is the most effective use of the EM method. Profiling makes possible the rapid mapping of subsurface conductivity changes, and the location, delineation, and assessment of spatial variables resulting from changes in the natural setting or from many contaminants.

EM is a very effective reconnaissance tool. The use of qualitative non-recorded data can provide initial interpretation in the field. If site conditions are complex, the use of a high-density survey grid, continuously-recording instruments, and computer processing may be necessary, in order to properly evaluate subsurface conditions. When continuously-recording instruments are used, total site coverage is feasible. More quantitative information can be obtained by using conductivity data from different depth ranges. At present, three different systems must be used to acquire data from 0.75 to 60 meters. Very often, however, data from two standard depths, e.g. six and fifteen meters, is adequate to furnish depth information.

Capabilities

- The EM profile method permits rapid data acquisition, resulting in high-density and high-resolution surveys.
- Profiling data may be acquired from various descrete depths, ranging from 0.75 meters to 60 meters.
- Continuously-recording instruments (to fifteen meter depth) can increase survey speed, density, and resolution permitting total site coverage, if required.
- EM reads directly in conductivity units (mm/m) permitting use of raw data in the field, and correlation to specific conductance of ground water samples.
- EM can map local and general changes in the natural geohydrologic setting.
- EM can detect and measure the boundaries of a conductivity plume.
- Direction of plume flow can be determined from an EM conductivity map.
- EM measurements taken at different times can provide the means to compute movement rates of conservative contaminants.
- EM can detect and map burial pits and trenches of both bulk and drummed wastes.
- EM can detect and map the location of buried metallic utility lines.

Limitations

- EM has less sounding (vertical) resolution than the resistivity method due to its limited number of depth intervals.
- The acquisition of data from depths of 0.75 to 60 meters requires the use of three different EM systems.
- Continuous data can be obtained only to depths up to approximately fifteen meters.
- An EM measurement is influenced by the shallower materials more than the deeper ones; this must be considered when evaluating the data.
- EM measurements become non-linear in zones of very high conductivity.
- The EM method is susceptible to noise from a number of sources, including natural atmospheric noise, powerlines, radio transmitters, buried metallic trash, pipes, cables, nearby fences, vehicles, and buildings.

MAGNETOMETER

Magnetic measurements are commonly used to map regional geologic structure and to explore for minerals. They are also used to locate pipes and survey stakes or to map archeological sites. They are commonly used at HWS to locate buried drums and trenches.

A magnetometer measures the intensity of the earth's magnetic field. The presence of ferrous metals creates variations in the local strength of that field, permitting their detection. A magnetometer's response is proportional to the mass of the ferrous target. Typically, a single drum can be detected at distances up to six meters, while massive piles of drums can be detected at distances up to twenty meters or more.

Some magnetometers require the operator to stop and take discrete measurements; other instruments permit the acquisition of continuous data as the magnetometer is moved across the site. This continuous coverage is much more suitable for high resolution requirements and the mapping of extensive areas.

The effectiveness of a magnetometer can be reduced or totally inhibited by noise or interference from time-variable changes in the earth's field and spatial variations caused by magnetic minerals in the soil, or iron and steel debris, ferrous pipes, fences, buildings, and vehicles. Many of these problems can be avoided by careful selection of instruments and field techniques.

At HWS, magnetometers may be used to:

- Locate buried steel containers, such as 55-gallon drums;
- Define boundaries of trenches filled with ferrous containers;
- Locate ferrous underground utilities, such as iron piles or tanks, and the permeable pathways often associated with them;
- Select drilling locations that are clear of buried drums, underground utilities, and other obstructions.

A magnetometer measures the intensity of the earth's magnetic field. Variations in this field may be caused by the natural distribution of iron oxides within the soil and rock or by the presence of buried iron or steel objects. (The magnetometer does not respond to nonferrous metals such as aluminum, copper, tin, and brass).

The earth's magnetic field behaves much as if there were a large bar magnet embedded in the earth. Although the earth's field intensity varies considerably throughout the United States, its average value is approximately 50,000 gammas.* The angle of the magnetic field with respect to the earth's surface also varies. In the U.S., this angle of inclination ranges approximately sixty to seventy-five degrees from the horizontal.

The intensity of the earth's magnetic field changes daily with sunspots and ionospheric conditions which can cause large and sometimes rapid variations. With time, these variations produce unwanted signals (noise) and can substantially affect magnetic measurements.

If the magnetic properties of the soil and rock were perfectly uniform, there would be no local magnetic anomalies; however, a concentration of natural iron minerals, or a buried iron object, will cause a local magnetic anomaly which can be detected at the surface.

Typical magnetic anomalies at HWS will range from one to hundreds of gammas for small discrete targets, depending on their depth. Massive piles of buried drums will result in anomalies of from one-hundred to one-thousand gammas or more.

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*The unit of magnetic measurement is the gamma. Recently, the gamma unit has been renamed the Nano Tesla. At this time, most instruments are still labeled in gammas, as are specification sheets, existing literature, and field data; hence all references to magnetic data in this document are expressed in gammas.

While several factors influence the response of a magnetometer, the mass of a buried target and its depth are the most important. A magnetometer's response is directly proportional to the mass of ferrous metal present and varies by one over the distance cubed ($1/d^3$) for total measurements. If a gradiometer is used, the response falls off even faster, as one over the distance to the fourth power ($1d^4$). With sensors of equal sensitivity, the total field system provides the greater working range. Typically a single drum can be detected at distances up to six meters or more. There is a wide variety of magnetometers available commercially; specific performance is highly dependent upon the type of magnetometer and the field conditions. Theoretically, the number of drums may be calculated, however, such results should be considered only approximations because of the number of variables associated with targets, site conditions, and calculations. Actual results may vary considerably.

A magnetometer with continuous recording capabilities can be used to produce a strip chart of the field data, which is helpful in assessing signal-to-noise ratio, anomaly shape, target location, and provides a means of exercising quality control over field data. This continuous coverage is much more suitable for high-resolution requirements and the mapping of extensive areas.

The effectiveness of a magnetometer can be reduced or totally inhibited by noise or interference from time-variable changes in the earth's field and spatial variations caused by magnetic minerals in the soil, or iron and steel debris, ferrous pipes, fences, buildings, and vehicles. Many of these problems can be avoided by careful selection of instruments and field techniques.

Capabilities

- Magnetometers respond to ferrous metals (iron or steel) only.
- Individual drums can be detected at depths up to six meters.
- Large masses of drums can be detected at depths of six to twenty meters.
- Magnetometers can provide a greater depth range than metal detectors.
- Interpretation of their data may be used to provide estimates of the number and depth of buried drums.
- They can provide a continuous response along a traverse line.
- They may be mounted on vehicles for coverage of a large site.

Limitations

- In general, magnetometers are susceptible to noise from many different sources, including steel fences, vehicles, buildings, iron debris, natural soil minerals, and underground utilities.
- Low cost units are limited in depth range (but their limitations make them insensitive to many of the above sources of noise).
- Total field instruments are also sensitive to fluctuations in the earth's magnetic field which can seriously affect data.
- Data is of limited use in determining the number and depth of targets.
- Complex site conditions may require the use of highly skilled operators, special equipment, and the recording and processing of data, along with skilled interpretation.

SEISMIC REFRACTION

Introduction

Seismic refraction techniques are used to determine the thickness and depth of natural layers of soil and rock and the travel time or velocity of seismic waves within the layers. Seismic refraction methods are often used to determine depths to specific horizons such as bedrock, clay layers, and water table. In addition to mapping natural features, additional secondary applications of the seismic method include the location and deleniation of the extent of burial pits and trenches at hazardous waste sites (HWS).

Seismic waves transmitted into the subsurface travel at different velocities depending upon the type of wave. Each type of wave in turn travels at difference velocities in various types of soil and rock of different densities and are refracted (or bent) at the interfaces between layers. Such refraction affects the seismic wave path of travel. An array of geophones implanted in the surface measures the travel time of the different seismic waves from the source of seismic disturbances to the geophones located at a predetermined number and interval of spacings. The time required for a specific wave type to complete this path is measured, permitting a determination to be made of the seismic velocity of each layer, the thicknesses of the layers and their depths, as well as the number of layers. The wave velocity in each layer is directly related to its material properties such as density and hardness.

A seismic source, an array of geophones, and a seismograph are required to make the field measurements. The seismic source may be a simple sledge hammer with which to strike the ground or explosives and any other seismic sources (such as natural earthquakes may be utilized for deeper or special applications. Geophones implanted in the surface of the ground translate the received vibrations of seismic energy into electrical signals. This signal is displayed on the seismograph, permitting measurement of the arrival time of a specific seismic wave type. Since the seismic refraction method measures ground vibrations of small magnitude, it is inherently susceptible noise from a variety of natural and cultural sources.

At HWS, seismic refraction can be used to define natural geohydrologic conditions, including thickness and depth of soil and rock layers, their physical properties such as density. Density in turn is related to composition, and density differences such as depth to bedrock or water table can be detected. It can also be used for the detection and location of features with anomalous density distributions relative to the surrounding medium such as pits and trenches, and for evaluation of the excavated depth of burial site or landfills.

<u>Principles</u>

Although a number of elastic waves are inherently associated with the method, conventional seismic refraction methods that have been employed at HWS are concerned primarily with the compressional wave (primary or P-wave). The compressional wave is also the first to arrive at the seismic station which makes its unique identification relatively easy.

P-waves propagate through subsurface layers through many different travel paths. the density of a layer and its elastic properties determine the velocity at which the seismic P-wave will travel through the layer. The porosity, mineral composition, and water content of the layer affect both its density and elasticity. A seismic sensor (geophone) detects the direct P-wave as it moves parallel along the top of the surface layer. The time of travel along this path is related to the distance between the sensor and the source and the material composing the layer.

If a layer of higher density, such a bedrock, occurs beneath a surface layer, a seismic wave propagating through the higher-density material will have a higher velocity. As a result, some of the seismic waves will be bent or refracted at the interface as they enter the bedrock. This phenomenon is similar to the refraction of light rays when light passes from a less dense medium, air, into more dense medium, water, and is described by Snell's law. One of these refracted P-wave fronts, crossing the interface at a critical angle, will move parallel to the top of the bedrock along the interface at a greater velocity equal to the bedrock velocity.

The seismic P-wave traveling along this interface will continually disperse energy back into the upper layer through refraction. These refracted P-waves may then be detected in the surface layer at various distances from the seismic source.

Beyond a certain distance (called the critical distance), the refracted P-wave will arrive at a geophone before the direct P-wave. This happens, even though the refraction path is longer than the direct path, because a sufficient portion of the wave's path occurs in the higher velocity bedrock allowing the refracted wave to surpass the direct wave front. Measurement of these first arrival times and their distances from the source permits calculation of layer velocities, thicknesses, and depth to bedrock. Application of the refraction seismic method is generally limited to resolving three to four layers.

The preceding concepts are based upon the fundamental assumptions that:

1. Seismic velocitis of geologic layers must increase with depth. This requirement is generally met at most sites.

2. Layers must be sufficient thickness to permit detection, given the time scale of seismograph in milliseconds.

3. Seismic velocities of layers must be sufficiently different to permit resolution of individual layers beyond seismic noise from natural and cultural sources.

<u>Factors to be Considered for Field Use</u>

The seismic line must be centered over the required area of interest and overall line length must be three to five times longer than the maximum depth of interest. Resolution is determined by the geophone spacing. Spacings of 3 to 15 meters are commonly used in many applications; however, closer spacings may be necessary for very high resolution in determining depth of shallow soil and geologic sections.

Repetition of seismic refraction lines along a grid will reveal lateral variations as well as vertical variations. Resulting data can be used to indicate trends of dipping layers and to detect anomalous conditions, such as clay seams, fractures, disturbed fault zones, thickness of soil mantle to bedrock, as well as the depth position of the water table.

Since the seismic refraction method measures compressional ground vibration, it is inherently sensitive to background noise from a variety of sources. Single enhancement and filtering is a significant aid when working in noisy areas and with small energy sources. Enhancement capability is available in most single and multi-channel seismomether systems. Enhancement is accomplished by adding a number of seismic signals from repeated hammer blows of similar force. The coherent seismic signal is increased in direct proportion to the number of blows, and the energy of each blow while random noise in the seismic signal is increased only by the square root of the number of blows. this causes the seismic signal to "grow" out of the background noise level, permitting detection of seismic waves significantly above noise level when operating in seismically noise environments and when employing greater distances between source and geophones. The overall results provide a more precise measurement of the first arrival time for P-waves because their resolution has been enhanced by varying such field parameters as distance between source and geophones and energy of seismic source

Depending on site conditions, a hammer is useful for obtaining seismic data to depths of 10 to 15 meters, while a 250-kilogram (500-pound) drop weight is required for depths of 50 to 100 meters. A more powerful seismic source is necessary to obtain deeper data or for work in noise areas. Many sources are available for meeting specialized needs. If the use of explosives or projectile sources is contemplated, the project manager must consider the safety hazards inherent in such methods, as well as their impact on the hazardous site itself, and the response from the surrounding neighborhood. Local laws, insurance requirements and the increase in project cost associated with compliance may also restrict the use of explosives.

Quality Control

Quality control can be achieved in several ways:

- A check of the seismic signal and noise conditions of the instrument display will verify the proper functioning of geophones and trigger cables and the correct range setting of the instrument for a given energy input. A gain setting on the seismometer must be selected that in not overwhelmed by the seismic source but within the optimum sensitivity range of the seismograph to a low resolution of the seismic signal above the seismic noise.

- In cases where paper records are not made, seismic arrival times must be visually picked from the electronic display and immediately plotted on a T/D graph in the field. Problems with improper picks are often discovered by early inspection of these plots. This will also allow determination of proper range scale and a check on the sensitivity range of the instruments.

- If the data is to be used for legal purposes, or if it must be reviewed by persons other than the field party chief, a hard copy of the data must be made. Multi-channel systems provide a much better means of presenting and documenting the data than do single-channel units. They also provide greater resolution and sensitivity. The individual travels of the single-channel systems have to be clopped and pasted together and provides a much less acceptable-looking and workable record. For simple, smaller surveys, however, the single-channel units can be satisfactory when used by experienced personnel.

- Background or off-site data is often required for correlation with known geologic information and to establish clean background noise level. Such background information is also useful as a reference for evaluating complex site conditions.

- Boring logs should be obtained to minimize the possibility that low velocity (hidden layers) or thin beds will remain undetected.

- Electronic calibration of the timing circuits of the seismograph may be done in the laboratory. However, this is rarely necessary because these timing circuits are crystal-controlled and have inherently low signal drift. Normal annual factory maintenance includes such calibration.

- The seismic system may also be run at a standard base station for periodic check of the instrument operation.

<u>Noise</u>

Seismic signals are strongly affected by ground vibration noise; less so be geologic scatter. In addition, the subjective pick of first arrival times can contribute a few milliseconds of error to timing intervals.

Unwanted vibrations that affect the seismic signal at he geophone may be caused by:

- Strong winds which move nearby trees;

- Sounds of airplanes;

- Surface sources, such as moving vehicles on nearby highways and railroads;

- Field crews walking near geophones;

- Nearby blasting or operation of heavy construction equipment;

- Micro-earthquakes

Geologic scatter may be caused by lateral variation in layer composition, irregular interface between layers, or a less dense layer occurring below a more dense layer. Such scatter can complicate interpretation of the T/D polt, but is also a valuable indicatory of site conditions.

Examples include:

- Variations in the thickness of the "soil zone";
- Boulders in glacial clay or till;
- Zones of increased cementation in sandstone and limestone;
- Lenses of sand in clay layers;
- Variations in saturated water content caused by perched water tables;
- Irregular bedrock surfaces;
- Limestone containing numerous solution cavities.
- Solution cavities filled in with material at different density.

<u>Summary</u>

The seismic refraction method can be used as an aid in defining natural geohydrologic conditions, including thickness and depth of soil and rock layers, and depth to bedrock or water table. Generally, two or three layers system can be analyzed in the field by the use of seismic refraction nomograms and simple calculations. More complicated sites having three to four layers with dip will require a programmable calculatory or a small computer to solve the seismic equations.

Since seismic velocity is directly related to a material properties of the layer such as density and hardness, lateral variations in composition or an irregular interface between layers will show up as geologic scatter on a T/D plot. This is a valuable indicator of variations and anomalous conditions in site conditions. The analysis of this data requires that the interpreter be knowledgeable about the method, the conditions under which the data was obtained, and the subsurface geohydrologic conditions, and the limitations in the seismic refraction method.

The spacing of geophones in the seismic line must be chosen to resolve thinnest layer in subsurface and its total length must be chosen to three to five times the maximum depth in the subsurface of interest. Lateral resolution in the data is also determined and improved by selecting the optimum geophone spacing.

Depending on site conditions, a hammer source is useful for obtaining seismic data to depth of 10 to 15 meters, while a 500-pound drop weight is required for a seismic source for depths of 50 to 100 meters. Explosives or projectile sources may be used to obtain deeper seismic data.

Since the seismic method measures small ground vibration, it is susceptible to vibration noise from a variety of natural and cultural sources.

The seismic method is inherently a station measurement because geophones must be implanted in the surface of the ground. this makes the method relatively slower when compared to the other continuous geophysical screening techniques that that do not require being rigidly attached to the earth's surface.

Capabilities

- Seismic refraction measurements can provide depth and thickness of surbsurface geologic layers including depth to bedrock and water table.

- Seismic velocity of the layers can be related to their physical properties including composition, density and elasticity.

- Disturbed soil zones can often be detected and mapped, permitting the location and delineation of burial zones and depth of their burial at HWS.

- Depth to bottom of disposal areas and landfills may be established without extensive drilling, although a test well or two can help in assuring correctness of interpreting seismic data.

Limitations

- Seismic data is gathered as a station (or stations) measurement and involves relatively slower and more involved field procedures compared to continuous methods.

- Interpretation of data requires that site conditions be relatively uniform to obtain highly accurate results.

- The seismic method is very susceptible to vibration noise and reliability depends on low background noise levels.

- Resolution of seismic velocity data of very shallow depths makes interpretation more difficult.

OVERSIZED

DOCUMENT

NUS
CORPORATION

1927 LAKESIDE PARKWAY
SUITE 614
TUCKER, GEORGIA 30084
404-938-7710

received
JUL 11 1989
SSB/SAS

C-586-7-9-80

July 11, 1989

FILE

COMPLETE
ENG.

Mailed to Westinghouse as requested
Mano 7/19/89

Mr. A. R. Hanke
Site Investigation and Support Branch
Waste Management Division
Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Subject: Westinghouse Electric Corporation
Athens, Clarke County, Georgia
TDD No. F4-8903-40

Dear Mr. Hanke:

Enclosed please find one (1) copy of the analytical results for inorganic and organic analyses of samples collected at the Westinghouse Electric Corporation site. Westinghouse representatives have requested these results and they should be forwarded to the following address:

Westinghouse Electric Corporation
c/o Mr. Frank Jones
Newton Bridge Road
Athens, Georgia 30613

Please contact me if you have any questions or comments.

Very truly yours,

Rebecca Hoffmann

Rebecca Hoffmann
Project Manager

Approved:

RH/dwf

Enclosure (1)

cc: Mario Villamarzo

ACCESS INFORMATION SHEET

Site Name: Westinghouse Electric Corp.

Site Address: Newton Bridge Road
Athens, GA 30613

EPA ID #: GAD003295144

FIT Project Manager: Rebecca Hoffmann

FIT State Coordinator: Geoff Carton

EPA Contact: Ken Lucas

Field Date: May 1, 1989

TDD Number: F4-8903-40

	File Information	Verification
Facility Owner/Operator Address Phone No. Principal Contact	Westinghouse Electric Corp. Newton Bridge Road Athens, GA 30613 (404) 548-3121 Frank ~~Jones~~ JAMES (Environmental Control Officer) conversation w/ HARRY BRYAN HIS SUPERVISOR	
Landowner Address Phone No. Principal Contact (if different from above)	Westinghouse Electric Corp. 11 Stanwix Street Pittsburgh, PA 15222 Samuel Pitts (Vice President Environmental Affairs) (412) 255-1770	
Date of Information	December 1988	

Date Access Required (3 weeks prior to field date) ____________

Date Information Submitted to EPA 3/30/89

Comments:

April 17th or 18th of April
for onsite Recon

NUS
CORPORATION
1927 LAKESIDE PARKWAY
SUITE 614
TUCKER, GEORGIA 30084
404-938-7710

received
APR 17 1989
SISB/SAS

C-586-4-9-118

April 13, 1989

Mr. A.R. Hanke
Site Investigation and Support Branch
Waste Management Division
Environmental Protection Agency
345 Courtland Street, N. E.
Atlanta, Georgia 30365

Subject: Study Plan - Revision 0
Screening Site Inspection - Phase II
Westinghouse Electric Corporation
Athens, Clarke County, Georgia
EPA ID No. GAD003295144
TDD No. F4-8903-89

Dear Mr. Hanke:

Enclosed please find one (1) copy of the Study Plan for the Screening Site Inspection to be conducted at the above-referenced site during the week of May 1, 1989.

If you have any questions concerning the project, please contact me at NUS.

Very truly yours,

Rebecca Hoffmann

Rebecca Hoffmann
Project Manager

Approved

RH/gwn

Enclosure (1)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

/ SAS
RECEIVED
FEB 20 1991
EPA - REGION IV

REPLY TO ATTENTION OF:

Date: FEB 13 1990

TO: Regional Site Assessment Manager Contacts

FROM: Linda Martin, SAM Region

RE: Kick off Conference Call for the National Site Assessment Managers Association (NSAMA)

I really appreciate all the interest shown for the NSAMA in Santa Fe, NM. I was able to get one contact person from each Regional office. Thank you!

I am writing this memo to get started on organizing this Association. I have enclosed a list of names and address for each contact person along with a draft agenda for our first call. I would like to hold the call on Feb 25 or Feb 28 from 1 to 3pm eastern time. Please let me know ASAP which date you prefer. If for some reason you can not attend please have someone else from your region sit in on the call. I will forward details on the call as soon as they are available. If there are any changes to the Contact list or if you have any other agenda items you wish to add please let me know.

Also for your review, I have attached a copy of a proposed SAM survey and copies of the RPM association charter and By Laws. I thought that we could develop our charter and by laws from this example. You might want to collect ideas from other SAMs in your region to present during this call. If you have any further questions or concerns about anything please feel free to contact me (FTS 353-9486). Thank you for your help.

Attachments

CC. Section Chiefs Regions 1-10
Suzanne Wells, HQ
Penney Hansen, HQ

I will arrange a conference room when I get the exact date for conf. call. Out in Santa Fe I was appointed contact, but I think this is something we are all interested in. Please complete the survey and return to me, ASAP.

Debbie

DRAFT AGENDA

- Define a SAM
  - What does a SAM do
  - what does each region define as a SAM
  - Gear this to be a professional organization

- SAM Survey
  -Is this needed
  -Ideas on changes
  -Volunteer to compile data
  -Make a SAm directory out of the data

- RPM Charter
  -should we use as a base for our charter
  -Volunteer to draft SAM charter

- RPM By Laws
  - Should we use as a base for our by laws
  - Volunteer to draft SAM by laws

- Other items of concern

- Next call

SAM SURVEY

Objective: To determine if Superfund SAM's are interested in forming a national organization, Once collated, the results will be returned to the Regions. Information from this and other surveys might also be used to develop a SAM directory. Thank you for your assistance.

SAM Name: ______________________________

Phone #: ________________ Region: ____ Mail Code: ________

1. Would a national organization for SAMs be beneficial?
   YES NO

2. Would you participate in such an organization?
   YES NO

3. What priorities/goals should a SAM organization have?

   Career Development ___
   Technical Assistance/transfer ___
   Networking ___
   Sharing of experiences ___
   Information Clearing House ___
   Other ______________________________

4. Should a regular national meeting be held? YES NO

5. How frequently should a national meeting be held? YEARLY___
   Twice a Year ___
   Other ___

6. What committees might be formed to address SAM issues?

   Career Development _____
   Communication _____
   Training/education _____
   Technical Transfer _____
   Other _________________________

7. Any other comments/questions/ideas?

NATIONAL ASSOCIATION OF REMEDIAL PROJECT MANAGERS

I. STATEMENT OF ESTABLISHMENT

On this day the United States Environmental Protection Agency's (EPA) Remedial Project Managers (RPM's) have assembled to formalize their establishment of the National Association of Remedial Project Managers (NARPM).

II. STATEMENT OF PURPOSE

The NARPM is expressly chartered to the following purposes:

A. To further the professional development of its membership, more specifically:

1. To foster and encourage in its members the finest professional work ethic.

2. To stimulate its members to produce work of outstanding professional quality and technical competence.

3. To recognize outstanding professional achievement among its membership.

4. To encourage its members to maintain and further develop their technical base and their knowledge of the state of the art through continued learning.

5. To foster public and private awareness of the technical competence and professional achievement of its membership.

B. To stimulate among its membership a justifiable pride in the value to humanity of the professional work they do, including:

1. Actions taken in defense of public health and life.

2. Actions taken in defense of our environment.

3. Actions taken in defense of public welfare and property.

C. To seek and foster technical excellence by:

1. Encouraging intra- and inter-Regional technology transfer and disseminating theoretical and practical information regarding innovative technical applications to current and future remedial response actions.

2. Encouraging direct communication between RPMs regarding work in progress, with special emphasis on methodology.

3. Encouraging RPM participation in Agency innovative technology demonstration projects.

D. To improve communication and interaction between the Regions and with Headquarters by:

   1. Stimulating ongoing dialogue among RPMs through the scheduling, planning, and conducting of National RPM conferences on a bi-annual basis, and other periodic area or zone activities as needed.

   2. Providing a National forum for dialogue and consensus regarding issues of ongoing and current concern to RPMs, and regarding potential solutions to matters affecting their work and their careers.

   3. Providing recommendations to the Agency for consideration of such proposed consensus solutions to problems affecting RPMs.

E. To establish and nurture a sense of unity, purpose and teamwork among RPMs.

To the above purposes the undersigned to subscribe, and in witness thereto set their hands, that this National Association of Remedial Project Managers be established on this _____ day of _________ 1989.

ATTACHMENTS

NARPM Interim Bylaws

I. Statement of Intent

These Interim Bylaws are established and approved by a majority vote of the Regional Representatives of the National Association of Remedial Project Managers, with the intent that they shall serve the purposes of NARPM as contained in the Charter, until such time as first National Conference of NARPM is held.

II. Membership in NARPM

A. Membership, except as modified below, is limited to Remedial Project Managers employed by the U.S. Environmental Protection Agency, engaged in or supervising oil or hazardous materials incident response activities as provided under Federal law.

B. Membership in this Association shall cease on the effective date of resignation from the U.S. Environmental Protection Agency or transfer to duties other than as provided under II-A, above.

C. Membership, as defined (II-A) above, shall be considered active. Members retiring from Federal service or detached from qualifying duty for over 365 days may, upon written request, remain as inactive members.

D. Active memberships may be granted by NARPM Council balloting following receipt of voluntary request, verbal or written, from qualified persons (per II-A above), and upon payment of NARPM dues as defined below.

E. Voting shall be restricted to active members.

F. Honorary membership may, from time to time, be granted to any person deemed by the active membership by majority (IV-F) vote to have demonstrated outstanding dedication to environmental conservation or to the chartered purposes of this Association. (See II-G and V-H of these bylaws).

G. Honorary membership granted by this Association shall become effective only upon receipt of written acceptance from the grantee, or from heirs or assigns of the grantee.

H. Membership may be revoked for cause (actions unbecoming an RPM). A revocation action should be: initiated PER IV-H below, by a majority of the elected council members and confirmed by a majority vote (IV-E below). Should such unbecoming conduct be attributed to (a) council member(s), then any three (3) active members acting together may refer the issue of revocation to the active membership, detailing the charge. Any active member referred for revocation shall have: the right to vote on the matter, a copy of the charge and 60 days to present refuting testimony to the active membership prior to the start of the 30 day balloting period. Revocation of (a) council member(s) shall initiate the balloting period for replacement. The elected replacement council member(s) shall be, for this purpose only, exempt from the provisions of III-C and II-D, below, and shall serve only the remainder of the revoked council member(s) term(s).

I. Active membership in this Association may be involuntarily or voluntarily converted to inactive membership for reasons of nonparticipation. For this purpose, participation shall be deemed to include voting during the year in at least 50% of the general ballotings, attendance at a minimum of one Regional or National meeting per year, and payment of dues established elsewhere in these Bylaws.

III. Organization of NARPM

A. This Association is founded squarely upon its active membership, which is its own governing body. In consequence, all major decisions shall be taken by, and in accord with, a balloting of the active members by name against the roster.

B. Since it is impractical to frequently assemble the entire active membership, a representative council shall be elected by the active membership. The council shall consist of fourteen active members, one of which shall be Chair, one Vice Chair, one Treasurer, one Secretary, and ten Regional Representatives. The chartering election balloting shall elect the Chair, Vice Chair, Treasurer and Secretary for two years and the Regional Representatives for one year. Subsequent elections shall select the appropriate replacement council members to serve two year terms and shall be held prior to 30 days from the end of the term, thus guaranteeing a continuity of current experience on the council. Regional Representatives will be elected by majority vote of each region's active membership. Should a Regional Representative be unable to attend a council meeting, he/she may designate an alternate RPM to serve for this purpose.

C. Since the purpose of the Council is to serve and involve the active membership, no council member shall serve more than one council term in any four year period.

IV. NARPM Balloting Procedures, Membership Vote

A. Balloting shall be by written, signed vote on a simple form.

B. Ballots shall normally be cast by placing them in the ballot box, in the NARPM Secretary's office, or alternately by mailing the ballot to the NARPM Secretary.

C. Ballots shall be counted, within 30 days of the ballot date, by the NARPM Secretary or, in the case of revocation, by any 3 active members assembled, and reported to the NARPM Council within 30 additional days.

D. Balloting shall require a quorum, with over 50% of the active membership voting, in order to constitute a valid vote.

E. A majority vote shall consist of quorum plus agreement, pro or con, by over 50% of the total active membership.

F. A unanimous vote shall consist of agreement, pro or con, of all the non-abstaining ballots cast, quorum per IV-D, and majority per IV-E above.

G. Ballots shall allow each active member to vote approval (pro) or disapproval (con) on any issue, or to abstain. Ballots cast abstaining shall count toward quorum and shall constitute participation (II-I) in the balloting.

H. Issues requiring balloting shall be presented to the council chair by any active member, in writing. No issue shall be presented to the active membership for balloting without prior majority agreement of the council, except as provided in II-H, above.

I. Ballots may be accompanied (covered) by a copy of the issue request, IV-H, above, but shall contain title and summary of the issue, and shall be cast alone.

J. Issues presented to the active membership and requiring a consensus/majority vote shall be considered approved if the required majority (IV-E) votes approval (pro), shall be considered disapproved if the required majority votes disapproval (con) and shall be considered tabled if no quorum is achieved within 30 days, or if neither "pro" nor "con" receives a majority (per IV-E). Tabled issues shall not be re-balloted unless re-presented per IV-H, above.

K. Issues of proposed change to the Charter, Bylaws or annual dues shall be decided by active membership vote.

V. Balloting Procedure, NARPM Council

A. Balloting per IV-A.

B. Ballots cast shall be mailed to the NARPM Secretary, except for balloting conducted during a council meeting.

C. Ballots shall be tallied by the Secretary, and original ballots verified at the next RPM Conference or NARPM Council meeting, whichever comes first.

D. Results of NARPM Council decisions, recommendations, or discussions shall be reported to the Regional Representatives within 60 days of the balloting period established by the Council.

E. Matters of simple funding disbursal under $500.00 shall be decided by council balloting alone. Matters of minor petty cash (under $100.00) disbursal shall not require balloting and may be authorized by any two officers.

F. Matters of funding disbursal over $500.00 shall be presented for membership vote per IV-A through K, above, excepting initial incorporation costs, which are approved herewith.

G. On matters of national import or controversial nature, the council may opt to present the issue(s) for membership balloting per IV-A through K, above.

H. Honorary membership can be granted by council balloting in response to a proposal from a Regional Representative.

I. The Chair will not ordinarily vote in matters requiring council balloting unless balloting results in a tie vote, in which case the Chair will break the tie.

<u>VI. DUES</u>

A. Chartering Fee: A (one time) chartering fee in the amount of $10.00 will be paid by each new member as a condition of membership, to cover costs of incorporation.

B. Annual Dues: Annual dues are hereby established at $10.00 per year, payable by active members only.

C. Non-payment of annual dues within the time period established below shall automatically convert membership to <u>inactive</u> (II-I).

D. Dues shall be payable by check or money order within the first quarter of each fiscal year, beginning fiscal year 1990.

E. In the event of dissolution of this association, the net assets thereof shall be distributed evenly among the active membership of record at the time of dissolution, conformance with applicable state laws of the state in which NARPM is incorporated, and with IRS regulation section 1.501(c)(3)-1(b)4 for the dissolution and distribution of such assets.

VII. USE OF ASSOCIATION ASSETS

Disbursal or disposal of assets of this association shall be limited to the necessary costs of attainment of the purposes detailed in the charter, and to the ability of the association to pay, except as provided in VI-E, above.

VIII. AUTHORIZATION OF THESE BYLAWS

These Interim bylaws are appended to the NARPM Charter, and authorized by the chartering members by signatures affixed to the charter and by roll call vote of the eleven assembled authorized regional representatives, on this 22nd day of June, 1989 in Atlanta, Georgia, as attested by their signatures below.

REGION	REPRESENTATIVE SIGNATURE	REPRESENTATIVE PRINTED NAME
I		
II		
III		
IV	Jon K Bornholm	Jon K Bornholm
V	Ken Tindall	Ken Tindall
VI		
VII	Steve A. Kovac	Steve A. Kovac
VIII	Marie B. Zanowick	Marie B. Zanowick
IX		
X	David A Tetta	David A. Tetta

SITE ASSESSMENT ASSOCIATION
REGIONAL CONTACT LIST

Region 1

Jane Anderson
USEPA
J.F. Kennedy Fed. Bld
Mail Code: Hss-can-7
Boston, MS 02203

FTS 833-1698

Region 2

Ben Conetta
USEPA
26 Federal Plaza
Mail Code: RM 13-100
New York, NY 10278

FTS 264-6696

Region 3

Lorie Acker
USEPA
841 Chestnut Buldg.
Mail Code: 3HW13
Philadelphia, PA 19107

FTS 597-3165

Region 4

Debbie Vaughn-Wright
USEPA
345 Courtland Street
Mail Code:
Atlanta, Ga. 30365

FTS 347-5065

Region 5

Linda Martin
USEPA
230 S Dearborn
Mail Code: 5HS TUB 7
Chicago, Il 60604

FTS 353-9486

Region 6

Barbara Driscoll
USEPA
1445 Ross Avenue
Mail Code: 6H MA
Dallas, TX 75202

FTS

Ed Sierra
USEPA
FTS 255-6491

Region 7

Peter Culver
USEPA
726 Minnesota Ave
Mail Code:
Kansas City, KS 66101

FTS 276-7707

Region 8

Pat Smith
USEPA
999 18th street, Suite 500
Mail Code: 8HWM-SM
Denver, CO 80802

FTS 330-1262

Region 9

Carolyn Douglas
USEPA
75 Hawthorne
Mail Code:
San Francisco, CA 94105

FTS 744-2343

Region 10

Deborah Flood
USEPA
1200 Sixth Ave
Mail Code: HW-093
Seattle, WA 98101

FTS 399-2722

Headquarter

Tina Maragousis
USEPA
Mail Code: OS 230
401 M Street S.W.
Washington, D.C. 20460

FTS 382-7393